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Emissions Inventories for Urban Airshed Model Application in the Philadelphia AQCR (Air Quality Control Region)

Engineering-Science, Inc.
Fairfax, VA

Prepared for

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16. ABSTRACT

This report documents the procedures used to develop emissions input required by the Urban Airshed photochemical oxidant model. Ambient air quality data were gathered as part of another effort during the summer of 1979 in Philadelphia to be used in the model validation effort. For 1979 and the 1987 projection year, ES compiled hour by hour emissions data for a representative weekday in the oxidant season. The pollutants inventoried are five categories of VOC required by the Airshed model, four categories of VOC defined in RAPS, NO, NO_2, CO, SO_2, and TSP. Point and area sources were considered with the highway vehicle portion of the inventory being subcontracted to DVRPC. County level area source data were allocated to a 502-cell grid system. Projections were made so that ozone air quality in 1987 could be investigated. ES developed annualized EIS/P&R data and data files containing temporal and VOC/NO_x profiles in order to generate the data packets required by the Airshed model.

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CHAPTER 1

INTRODUCTION

The Office of Air Quality Planning and Standards of the U.S. Environmental Protection Agency (EPA) is attempting to validate and test the Urban Airshed photochemical oxidant model in several cities around the country. Such a model is needed to develop accurate source-receptor relationships for reactive pollutants discharged to the atmosphere. The program undertaken by EPA will compare model predictions with measured ambient air quality data and with output of simpler models such as EKMA. In addition, the impact of growth and the significance of selected control strategies will be examined. Engineering-Science (ES) is participating in the program by developing the emissions data required by the model for application to the metropolitan Philadelphia area. This report documents the preparation of emissions input for the Urban Airshed model.

An ambient monitoring program was conducted in the Philadelphia area during the summer and fall of 1979. The data collected during this program will be used as a basis for validation of the Urban Airshed model. In support of this effort, ES developed inventory data representative of calendar year 1979 for a typical weekday during the oxidant season.

Since the entire 11-county Metropolitan Philadelphia Air Quality Control Region (AQCR) is classified as nonattainment with respect to photochemical oxidants, the area selected for emission data development was the AQCR. The inventory area encompasses the monitoring station sites used to collect ambient data. The AQCR is approximately 12,500 km^2 in area and is comprised of five counties in New Jersey, five counties in Pennsylvania, and one county in Delaware. The grid system used in generating model input consists of 502 grid cells which are five kilometers on a side.

Within the AQCR, ES generated emissions data for both point and nonhighway area sources. The development of the highway vehicle inventory was completed by the Delaware Valley Regional Planning Commission (DVRPC). DVRPC documented its efforts in Philadelphia Air Quality Control Region Mobile Source Emissions Inventory. For the base year 1979, ES compiled hour-by-hour emissions data for a representative weekday in the oxidant season. Emission rates were determined for the following pollutants: nitric oxide (NO); nitrogen dioxide (NO_2); five categories of volatile organic compounds (VOC) required for the Urban Airshed model; four categories of VOC defined in the St. Louis, Missouri, Regional Air Pollution Study (RAPS); carbon monoxide (CO); particulate matter (TSP); and sulfur dioxide (SO_2). County level area source data were allocated to the

502-cell grid system. Projection factors were developed in order to generate a 1987 inventory.

The first major task for the preparation of emissions input to the model was to assemble annualized emissions data for point and area sources in Emission Inventory Subsystem/Permits and Registration (EIS/P&R) format. Data files containing temporal and VOC/nitrogen oxide (NO_x) profiles were then generated. These data files, along with the EIS/P&R masterfiles, were input to a module of the Engineering-Science Air Quality (ESAQ) system, which output the data packets required by the Airshed model. DVRPC provided gridded hourly emissions values which required only that ES develop VOC/NO_x profiles to produce model input.

The inventory procedures used in developing the emissions data followed as closely as possible guidance published by EPA for preparing emissions inventories for the 1982 Ozone State Implementation Plan (SIP) revisions. This was done to maximize the usefulness of the effort to the regulatory agencies in their SIP revisions and to enable the products of the study to be used in the Northeast Corridor Regional Modeling Project (NECRMP).

The organization of this report reflects the general procedures employed. Chapters 2 and 3 describe the methods used to develop EIS/P&R masterfiles for point and area sources. Chapters 4 and 5 address the VOC/NO_x profile development and the generation of temporal factors, respectively. Finally, Chapter 6 describes the process of data packet creation for input to the Airshed model. The appendices contain detailed information used in the study.

Tables 1.1 and 1.2 summarize 1979 and 1987 VOC emissions for the Philadelphia AQCR. The table shows emissions according to the categories suggested in Volume I of Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds, EPA-450/2-77-028 (September 1980). The emissions data for highway vehicles developed by DVRPC are included in the tables. Summarizing data in this fashion provides a means for comparing data from the Philadelphia area with inventories generated in other parts of the country. For the point source categories included in Tables 1.1 and 1.2, Appendix C identifies the source classification codes (SCC) and/or standard industrial classification (SIC) codes in the masterfile which were aggregated to develop the emission totals.

This report documents a final version of emissions inputs for the Urban Airshed model. A draft report for interim emissions input was prepared in March 1981. Differences in the reports and emissions inputs are:

- Highway vehicle emissions in the draft were based on MOBILE 1 emission factors and in the final on MOBILE 2 emission factors.
- Revised methodologies were employed in the final for developing emissions data for significant area source categories.
- Revised point source masterfiles were used in the final report as well as revised information on emission reductions resulting from regulations included in the 1979 SIP revisions.

- The 1982 projection year was not considered in the final document.

TABLE 1.1

SUMMARY OF VOC EMISSIONS FOR 1979 IN THE PHILADELPHIA AQCR

Source Category	Emissions (tons)		
	Point	Area	Total
STORAGE, TRANSPORTATION AND MARKETING OF VOC			
Oil and Gas Production & Processing			
Gasoline and Crude Oil Storage	15,989		15,989
Synthetic Organic Chemical Storage & Transfer	4,640		4,640
Ship and Barge Transfer of VOC	9,340		9,340
Barge and Tanker Cleaning			
Bulk Gasoline Terminals	1,307		1,307
Gasoline Bulk Plants	4,807		4,807
Service Station Loading (Stage 1)		5,595	5,595
Service Station Unloading (Stage 2)		10,119	10,119
Others		2,004	2,004
INDUSTRIAL PROCESSES			
Petroleum Refineries	23,516		23,516
Lube Oil Manufacture			
Organic Chemical Manufacture	7,064		7,064
Inorganic Chemical Manufacture	1,860		1,860
Fermentation Processes		198	198
Vegetable Oil Processing		2,456	2,456
Pharmaceutical Manufacture	440		440
Plastic Products Manufacture	1,020		1,020
Rubber Tire Manufacture	5,428		5,428
SBR Rubber Manufacture	30	2,837	2,867
Textile Polymers & Resin Manufacture	2,105	7,929	10,034
Synthetic Fiber Manufacture	131		131
Iron and Steel Manufacture	9,966		9,966
Others	2,039	6,238	8,277
INDUSTRIAL SURFACE COATING			
Large Appliances	13		13
Magnet Wire		810	810
Automobile	8,403		8,403
Cans	2,617	4,926	7,543
Metal Coils	11	969	980
Paper	15,332	5,837	21,169
Fabric	1,141	65	1,206
Metal Wood Products	1,145	4,371	5,516
Miscellaneous Metal Products	5,259	19,140	24,399
Plastic Parts Painting	1,775	2,525	4,300
Large Ships	283		283
Large Aircraft	16		16
Others	4,088		4,088

TABLE 1.1--Continued

Source Category	Emissions (tons) Point	Area	Total
NON-INDUSTRIAL SURFACE COATING			
Architectural Coatings		13,519	13,519
Auto Refinishing	76	7,832	7,908
Others			
OTHER SOLVENT USE			
Degreasing	537	19,892	20,429
Dry Cleaning	126	6,684	6,810
Graphic Arts	4,333	1,862	6,195
Adhesives			
Cutback Asphalt		2,833	2,833
Solvent Extraction Processes			
Consumer/Commercial Solvent Use		29,402	29,402
Other			
OTHER MISCELLANEOUS SOURCES			
Fuel Combustion	2,464	1,410	3,874
Solid Waste Disposal	545	26	571
Forest, Agricultural, and Other Open Burning		2,054	2,054
Pesticide Application		7,565	7,565
Waste Solvent Recovery Processes			
Stationary Internal Combustion Engines	143		143
Natural Gas Leaks		22,003	22,003
MOBILE SOURCES			
Highway Vehicles[a]		127,100	127,100
Off Highway Vehicles			
Rail		3,210	3,210
Vessels		2,229	2,229
Aircraft		3,097	3,097
Agricultural Equipment		731	731
Construction Equipment		534	534
Industrial Equipment		1,698	1,698
Small Gasoline Engines		5,539	5,539
AQCR TOTALS	137,989	335,239	473,228

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[a] Approximated from Philadelphia Air Quality Control Region Mobile Source Emissions Inventory, Delaware Valley Regional Planning Commission.

TABLE 1.2

SUMMARY OF VOC EMISSIONS FOR 1987 IN THE PHILADELPHIA AQCR

Source Category	Emissions (tons)		
	Point	Area	Total
STORAGE, TRANSPORTATION AND MARKETING OF VOC			
Oil and Gas Production & Processing			
Gasoline and Crude Oil Storage	8,849		8,849
Synthetic Organic Chemical Storage & Transfer	2,395		2,395
Ship and Barge Transfer of VOC	7,457		7,457
Barge and Tanker Cleaning			
Bulk Gasoline Terminals	886		886
Gasoline Bulk Plants	3,536		3,536
Service Station Loading (Stage 1)		226	226
Service Station Unloading (Stage 2)		778	778
Others		1,573	1,573
INDUSTRIAL PROCESSES			
Petroleum Refineries	12,384		12,384
Lube Oil Manufacture			
Organic Chemical Manufacture	3,323		3,323
Inorganic Chemical Manufacture	1,754		1,754
Fermentation Processes		203	203
Vegetable Oil Processing		2,513	2,513
Pharmaceutical Manufacture	442		442
Plastic Products Manufacture	1,007		1,007
Rubber Tire Manufacture	2,884		2,884
SBR Rubber Manufacture	22	2,903	2,925
Textile Polymers & Resin Manufacture	2,114	8,115	10,229
Synthetic Fiber Manufacture	53		53
Iron and Steel Manufacture	4,144		4,144
Others	1,642	6,384	8,026
INDUSTRIAL SURFACE COATING			
Large Appliances	11		11
Magnet Wire		828	828
Automobile	4,617		4,617
Cans	1,034	5,033	6,067
Metal Coils	11	990	1,001
Paper	8,002	5,963	13,965
Fabric	332	66	398
Metal Wood Products	795	4,466	5,261
Miscellaneous Metal Products	2,632	19,554	22,186
Plastic Parts Painting	1,795	2,580	4,375
Large Ships	183		183
Large Aircraft	20		20
Others	1,905		1,905

TABLE 1.2--Continued

Source Category	Emissions (tons)		
	Point	Area	Total
NON-INDUSTRIAL SURFACE COATING			
Architectural Coatings		14,073	14,073
Auto Refinishing	78	8,183	8,261
Others			
OTHER SOLVENT USE			
Degreasing	560	20,545	21,105
Dry Cleaning	120	6,370	6,490
Graphic Arts	1,654	1,943	3,597
Adhesives			
Cutback Asphalt		1,540	1,540
Solvent Extraction Processes			
Consumer/Commercial Solvent Use		30,606	30,606
Other			
OTHER MISCELLANEOUS SOURCES			
Fuel Combustion	2,184	1,341	3,525
Solid Waste Disposal	604	26	630
Forest, Agricultural, and Other Open Burning		2,788	2,788
Pesticide Application		8,301	8,301
Waste Solvent Recovery Processes			
Stationary Internal Combustion Engines	151		151
Natural Gas Leaks		24,599	24,599
MOBILE SOURCES			
Highway Vehicles[a]		49,900	49,900
Off Highway Vehicles			
Rail		3,305	3,305
Vessels		2,327	2,327
Aircraft		1,193	1,193
Agricultural Equipment		827	827
Construction Equipment		569	569
Industrial Equipment		1,730	1,730
Small Gasoline Engines		5,795	5,795
AQCR TOTALS	79,580	248,136	327,716

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[a] Approximated from Philadelphia Air Quality Control Region Mobile Source Emissions Inventory, Delaware Valley Regional Planning Commission.

CHAPTER 2

ANNUALIZED POINT SOURCE INVENTORIES

INTRODUCTION

Baseline inventories were obtained from the four air pollution control agencies in the 11-county area. Each agency supplied to ES a magnetic tape containing its most current point source masterfile. ES then collected any additional information that existed to update each masterfile and produce an accurate 1979 base year inventory. These updates were obtained through examinations of agency permit files, agency information not yet included in the masterfiles, and conversations with plant representatives. The primary procedure used to update the masterfiles was the application of projection factors along with a few EIS/P&R update transactions.

The major emphasis for the inventory was on emissions of VOC and NO_x, although the emissions of particulates, carbon monoxide, and sulfur dioxide were included. The inventory parameters updated as necessary were: stack location; actual stack emissions; percent annual throughput by season; normal hours per day, days per week, and weeks per year of operation; stack parameters (i.e., height, diameter, temperature, velocity, and flow rate) for those stacks to be modeled as elevated points; source classification code; and operating rate of processes for which emissions were updated. Projection data were gathered to use in developing the 1987 inventory. However, more effort was expended for the 1979 inventory since: (1) more accurate information was available to develop the 1979 inventory; (2) ambient monitoring data were collected during 1979 for validation of the model; and (3) the accuracy of the 1987 inventory is dependent upon the accuracy of the base year inventory.

In order to more fully explain the processes used to develop the base and projection year inventories, the following section delineates those procedures applied to the inventories provided by the four agencies in the study area. A detailed discussion is presented of the 1987 projection factors and those used to produce the 1979 base year inventory from the masterfiles provided by the agencies. Also discussed are the specific plant projection factors obtained during visits to plants with VOC or NO_x emissions of 5,000 tons per year or more.

BASE YEAR INVENTORY DEVELOPMENT

The first step taken in the development of the 1979 base year inventory was the collection of the most current point source masterfiles.

These masterfiles were updated as necessary before being finalized. Projection factors, along with information obtained from the respective agencies and plant representatives, were then used to generate data reflective of 1979 conditions. The following sections describe the procedures employed to produce the base year inventory.

Existing Inventories

The four air pollution control agencies within the Philadelphia AQCR provided magnetic tapes containing their most up-to-date masterfiles. The following subsections detail by each agency's geographic area the data collection, review, and update activities conducted.

Delaware - New Castle County

The Delaware Department for Natural Resources and Environmental Control (DNREC) supplied ES with 1979 emissions data in EIS/P&R format for New Castle County. DNREC includes all permitted sources on its EIS/P&R masterfile. A 1978 version of the masterfile was used in preparing a preliminary set of emission inputs to the Urban Airshed model. A review of the 1978 masterfile using an EIS/P&R edit program showed it to be complete and accurate. The 1979 version of the masterfile was summarized and compared to the 1978 file. The differences were discussed with DNREC personnel and found to be minor in most cases. Nearly all the differences resulted from changes in operating rates. Allowable emissions were entered in the 1979 masterfile for the General Motors plant. Based on a recommendation from DNREC personnel, the 1979 emission rates were changed to reflect the actual emissions in the 1978 masterfile. It was later discovered that the gasoline barge loading operation and fugitive losses from valves and seals at the Getty refinery were not included on the masterfile. Emissions of VOC from the barge loading amounted to 1,680 tons in 1980 and the fugitive losses were 207 tons in the same year. The UTM coordinates of these sources are approximately 446.0 easting and 4381.7 northing. These emissions were not included in the 1979 Urban Airshed model input supplied to EPA since the omission was discovered after the 1979 input had been submitted to EPA.

Pennsylvania - Philadelphia County

The Philadelphia Air Management Services (AMS) supplied ES with a tape containing 1979 emissions data in NEDS format for Philadelphia County. The inventory contained all permitted plants with emissions greater than one ton per year. A 1978 version of the inventory was used in preparing a preliminary set of emission inputs to the Urban Airshed model. A review of the 1978 masterfile using an EIS/P&R edit program showed it to be complete and accurate. The 1979 inventory was converted to EIS/P&R format, summarized, and compared to the 1978 file. The differences were discussed with AMS personnel and found to be accurate in most cases. The Philadelphia Electric Company station on N. Delaware and the Publicker Industries plant had lower NO_x emissions due to lower operating levels, and VOC reductions occurred at the Gulf Oil Company of Pennsylvania refinery as a result of reduced throughputs. AMS personnel later identified two changes which were necessary to the 1979 inventory. It was discovered that 3,200 tons per year of acetone was being emitted from a process at the Allied Chemical plant and that NO_x

emissions at Hastings and Company were 64 instead of 685 tons per year. These changes were incorporated in the 1979 EIS/P&R masterfile before generating the input to the Airshed model.

Pennsylvania - Bucks, Chester, Delaware, and Montgomery Counties

The four remaining Pennsylvania Counties in the study area are under the regulatory jurisdiction of the Pennsylvania Department of Environmental Resources (DER). DER maintains its inventory on a computer system called the Pennsylvania Emission Data System (PEDS) which differs significantly from NEDS as to the type, amount, and arrangement of information. According to DER, the 1978 version of this masterfile contains data for all plants with uncontrolled emissions in excess of 50 tons per year. A 1976 version of the inventory, after it had been updated by ES, was used in preparing a preliminary set of emission inputs to the Airshed model. A review of the 1976 data provided by DER in NEDS format indicated that the computerized conversion from PEDS to NEDS had not been performed accurately. ES spent a considerable amount of time in correcting the problems which included omission of some emission points and plants, incorrect stack data, and inaccurate control device efficiencies.

DER subsequently provided a tape containing 1978 emissions data in NEDS format for Bucks, Chester, Delaware, and Montgomery Counties. The inventory was created from the 1978 PEDS masterfile using a revised conversion program. The 1978 inventory was converted to EIS/P&R format, summarized, and compared to the updated 1976 masterfile. A number of differences in VOC emissions were discovered. After discussing the differences with DER personnel, they suggested that the 1978 masterfile be modified to reflect the 1978 emissions data compiled by DER for inclusion in their 1982 Ozone SIP revision. These data were provided to ES in tabular form and contained VOC emissions for the plant on an annual basis and for the principle emitting operations at each plant on a typical summer day basis. In cases that these data showed different emissions than the 1978 masterfile, updates by emission point were made based on the total annual plant emissions and the annual contribution from each principle emitting operation. Also, personnel in the DER regional office in Norristown provided revised stack or emissions data for two emission points associated with the coking operation at U.S. Steel. These updates were incorporated in the 1978 masterfile before generating the input to the Airshed model.

New Jersey - Burlington, Camden, Gloucester, Mercer, and Salem Counties

The New Jersey Department of Environmental Protection (DEP) employs a computerized emission data system for the entire State. The computer system is called the Air Pollution Emission Data System (APEDS) and it differs radically from NEDS. At the time the preliminary inputs to the Airshed model were being developed, too little usable information could be retrieved from APEDS to warrant use of its data. A NEDS inventory which generally represented 1974 or 1975 conditions had to be used for the preliminary model input. The accuracy and completeness of that inventory, although DEP was able to provide some 1979 updates, is questionable.

DEP undertook a large program to update and add information to APEDS. After this work was completed, ES created an EIS/P&R masterfile from the 1979-1980 APEDS data using a conversion program prepared by ES under contract to EPA Region II. ES discovered several problems with the EIS/P&R masterfile and identified them to DEP personnel. Information to correct these problems was supplied to ES and the masterfile was updated. In order to check the data in the updated masterfile, ES obtained a list of major facilities (those with actual emissions of VOC or NO_x of 100 tons per year or more) and corresponding emissions and compared the data in the list to the updated masterfile. Several discrepancies were found and discussed with DEP and EPA personnel. It was decided that a trip to the DEP field offices would be necessary to resolve the discrepancies. At that time, DEP was able to provide ES with an EIS/P&R masterfile which was created from further improved 1979-1980 APEDS data. These data compared more closely to the DEP major facilities list but a number of differences still existed.

A trip to the DEP field offices was made by ES and EPA and data for updating the 1979-1980 EIS/P&R masterfile provided by DEP were collected. Only sources with actual VOC or NO_x emissions of 100 tons per year or more were investigated. A detailed review of the data maintained at the field offices showed that a few plants which were thought to be major actually had emissions less than 100 tons per year. On the other hand a few sources were found that had emissions in excess of 100 tons per year although they were not on the major facilities list. All needed emissions and stack data were collected and updates made to the EIS/P&R masterfile. Insufficient data were available in the DEP field office for the Dupont Chambers Works plants. The Supervisor of Air Quality for the Chambers Works was asked to provide emissions and stack data representative of 1979 conditions for the largest VOC and NO_x emitters. These data were used to make final updates to the EIS/P&R masterfile before creation of the Airshed model input.

DEP personnel later indicated that another major facility of VOC emissions had been discovered in Gloucester County. EKCO Products, an aluminum coil coating operation in Clayton, had about 700 tons of VOC emissions in 1980. Existing regulations require 50% control for this plant which would result in a 1987 emission rate of 350 tons. The plant was discovered after the 1979 model input was submitted to EPA and thus was not accounted for in the input. Insufficient information was available on location of the plant to include it in the 1987 model input.

Inventory Adjustment to 1979 Base Year

The project required the use of a 1979 base year inventory for model validation. Both the Philadelphia County and New Castle County inventories collected from the respective agencies and updated represent 1979 conditions. No further modifications were necessary for these point source data. The New Jersey masterfiles represent 1979, 1980, and 1981 conditions but no data were available to determine differences between 1980/81 and 1979. DEP personnel suggested that all data be regarded as 1979 and as a result, no adjustments were made. The year of record of the point source data for the other Pennsylvania Counties was 1978. DER personnel recommended the application of projection factors to the 1978 data to obtain a 1979 masterfile. The projection factors applied are presented in Tables 2.1 through 2.4 and discussed in detail later in this chapter.

Information obtained from the plant visits relative to 1979 operations were not considered in making inventory adjustments. This is because the plant visits were conducted some time ago for the preliminary Airshed model input. Actual operation and emission data for 1979 have now become available for most counties. The most current masterfile available from DER is 1978 but these data are improved compared to the 1976 data previously used. Therefore, as suggested by DER personnel, employment-based projection factors were applied to the 1978 data to obtain the 1979 masterfile.

Plant Visits

Those plants with emissions of VOC or NO_x in excess of 5,000 tons per year contribute significantly to the total burden of these pollutants in the Philadelphia AQCR. As such, these plants were identified and either visited or contacted by phone (under the auspices of the local agency) to obtain more information on their operations. These plants are listed in Table 2.5 by company. Although the 3-M Company was identified as a source with emissions significant enough to warrant a visit, the company did not respond to information requests. The information requested of the plants was as follows:

- Verify data in the emission inventory:

  UTM coordinates
  Stack parameters
  Control equipment type and efficiency
  Operating information

- Information on 1979 operations to update inventory to 1979 conditions.

- Information on expected future operations including:

  Expansions
  Modifications
  Emission reductions
  Shutdowns
  Increased utilization of existing processes

- Information on operation data that would provide temporal variations for each hour of a typical weekday for at least the oxidant season and percent of annual emissions that could be expected during the oxidant season.

- Information available from stack tests or other types of emission characterization studies that would provide insight into the VOC and NO_x species present for each emission point.

The information obtained from the plants was applied, as appropriate, in the generation of the Urban Airshed model input for 1979 and 1987. The incorporation of these data is discussed in other sections of this chapter.

TABLE 2.1

PROJECTION FACTORS
BUCKS COUNTY, PENNSYLVANIA
BASE YEAR 1978

SIC	1979	1987	SIC	1979	1987	SIC	1979	1987
1	.9825	.8594	41	1.0051	1.0401	80	│	│
2	│	│	42	.9955	.9641	81	│	│
7	│	│	43	1.0051	1.0401	82	│	│
8	│	│	44	│	│	83	│	│
9	.9825	.8594	45	│	│	84	│	│
10	.9936	.9511	46	│	│	86	│	│
11	│	│	47	1.0051	1.0401	88	│	│
12	│	│	48	.9964	.9716	89	1.0201	1.1608
13	│	│	49	1.0055	1.0444	91	1.0159	1.1271
14	.9936	.9511	50	1.0031	1.0252	92	│	│
15	1.0032	1.0255	51	1.0031	1.0252	93	│	│
16	1.0032	1.0255	52	1.0092	1.0738	94	│	│
17	1.0138	1.1105	53	1.0092	1.0738	95	│	│
20	.9955	.9642	54	1.0092	1.0738	96	1.0159	1.1271
21	1.0010	1.0078	55	.9872	.8973	97	.9969	.9698
22	.9850	.8797	56	1.0092	1.0738			
23	.9994	.9954	57	│	│			
24	1.0058	1.0463	58	│	│			
25	1.0058	1.0463	59	1.0092	1.0738			
26	.9998	.9981	60	1.0062	1.0493			
27	.9973	.9673	61	│	│			
28	1.0004	1.0028	62	│	│			
29	.9853	.8828	63	1.0062	1.0493			
30	1.0010	1.0078	64	1.0119	1.0953			
31	1.0010	1.0078	65	1.0107	1.0856			
32	1.0036	1.0391	66	1.0062	1.0493			
33	1.0000	.9776	67	1.0062	1.0493			
34	.9997	.9975	70	1.0201	1.1608			
35	1.0043	1.0340	72	1.0201	1.1608			
36	1.0017	.9911	73	│	│			
37	1.0307	1.2452	75	│	│			
38	1.0233	1.1861	76	│	│			
39	1.0010	1.0078	78	│	│			
40	1.0082	1.0652	79	│	│			

TABLE 2.2

PROJECTION FACTORS
CHESTER COUNTY, PENNSYLVANIA
BASE YEAR 1978

SIC	1979	1987	SIC	1979	1987	SIC	1979	1987
1	.9838	.8705	41	1.0018	1.0152	80	│	│
2	│	│	42	.9955	.9641	81	│	│
7	│	│	43	1.0018	1.0152	82	│	│
8	│	│	44	│	│	83	│	│
9	.9838	.8705	45	│	│	84	│	│
10	.9929	.9484	46	│	│	86	│	│
11	│	│	47	1.0018	1.0152	88	│	│
12	│	│	48	.9964	.9716	89	1.0107	1.0853
13	│	│	49	1.0055	1.0444	91	1.0145	1.1163
14	.9929	.9484	50	1.0043	1.0343	92	│	│
15	1.0003	1.0021	51	1.0043	1.0343	93	│	│
16	1.0003	1.0021	52	1.0073	1.0581	94	│	│
17	1.0138	1.1105	53	1.0073	1.0581	95	│	│
20	.9955	.9642	54	1.0073	1.0581	96	1.0145	1.1163
21	1.0025	1.0202	55	.9872	.8973	97	.9952	.9618
22	.9850	.8797	56	1.0073	1.0581			
23	.9994	.9954	57	│	│			
24	1.0058	1.0463	58	│	│			
25	1.0058	1.0463	59	1.0073	1.0581			
26	.9998	.9981	60	1.0016	1.0123			
27	.9973	.9673	61	│	│			
28	1.0004	1.0028	62	│	│			
29	.9853	.8828	63	1.0016	1.0123			
30	1.0025	1.0202	64	1.0119	1.0953			
31	1.0025	1.0202	65	1.0107	1.0856			
32	1.0036	1.0391	66	1.0016	1.0123			
33	1.0000	.9776	67	1.0016	1.0123			
34	.9997	.9975	70	1.0134	1.1074			
35	1.0043	1.0340	72	1.0107	1.0853			
36	1.0017	.9911	73	│	│			
37	1.0307	1.2452	75	│	│			
38	1.0233	1.1861	76	│	│			
39	1.0025	1.0202	78	│	│			
40	1.0082	1.0652	79	│	│			

TABLE 2.3

PROJECTION FACTORS
DELAWARE COUNTY, PENNSYLVANIA
BASE YEAR 1978

SIC	1979	1987	SIC	1979	1987	SIC	1979	1987
1	.9837	.8682	40	1.0082	1.0652	78	│	│
2	│	│	41	1.0051	1.0408	79	│	│
7	│	│	42	.9955	.9641	80	│	│
8	│	│	43	1.0051	1.0408	81	│	│
9	.9837	.8682	44	│	│	82	│	│
10	.9961	.9620	45	│	│	83	│	│
11	│	│	46	│	│	84	│	│
12	│	│	47	1.0051	1.0408	86	│	│
13	│	│	48	.9964	.9716	88	│	│
14	.9961	.9620	49	1.0055	1.0444	89	1.0192	1.1485
15	1.0015	1.0119	50	1.0054	1.0431	91	1.0212	1.1692
16	1.0015	1.0119	51	1.0054	1.0431	92	│	│
17	1.0138	1.1105	52	1.0088	1.0704	93	│	│
20	.9955	.9642	53	1.0088	1.0704	94	│	│
21	1.0022	1.0179	54	1.0088	1.0704	95	│	│
22	.9850	.8797	55	.9872	.8973	96	1.0212	1.1692
23	.9994	.9954	56	1.0088	1.0704	97	1.0000	1.0000
24	1.0058	1.0463	57	│	│			
25	1.0058	1.0463	58	│	│			
26	.9998	.9981	59	1.0088	1.0704			
27	.9973	.9868	60	1.0034	1.0273			
28	1.0004	1.0028	61	│	│			
29	.9853	.8828	62	│	│			
30	1.0022	1.0179	63	1.0034	1.0273			
31	1.0022	1.0179	64	1.0119	1.0953			
32	1.0036	1.0391	65	1.0107	1.0856			
33	1.0000	.9776	66	1.0034	1.0273			
34	.9997	.9975	67	1.0034	1.0273			
35	1.0043	1.0340	70	1.0192	1.1485			
36	1.0017	.9911	72	│	│			
37	1.0307	1.2452	73	│	│			
38	1.0233	1.1861	75	│	│			
39	1.0022	1.0179	76	│	│			

TABLE 2.4

PROJECTION FACTORS
MONTGOMERY COUNTY, PENNSYLVANIA
BASE YEAR 1978

SIC	1979	1987	SIC	1979	1987	SIC	1979	1987
1	.9827	.8620	40	1.0082	1.0652	78	│	│
2	│	│	41	1.0047	1.0374	79	│	│
7	│	│	42	.9955	.9641	80	│	│
8	│	│	43	1.0047	1.0374	81	│	│
9	.9827	.8620	44	│	│	82	│	│
10	.9943	.9556	45	│	│	83	│	│
11	│	│	46	│	│	84	│	│
12	│	│	47	1.0047	1.0374	86	│	│
13	│	│	48	.9964	.9716	88	│	│
14	.9943	.9956	49	1.0055	1.0444	89	1.0143	1.1141
15	1.0050	1.0402	50	1.0025	1.0196	91	1.0222	1.1777
16	1.0050	1.0402	51	1.0025	1.0196	92	│	│
17	1.0138	1.1105	52	1.0096	1.0767	93	│	│
20	.9955	.9642	53	1.0096	1.0767	94	│	│
21	1.0025	1.0197	54	1.0096	1.0767	95	│	│
22	.9850	.8797	55	.9872	.8973	96	1.0222	1.1777
23	.9994	.9954	56	1.0096	1.0767	97	.9981	.9752
24	1.0058	1.0463	57	│	│			
25	1.0058	1.0463	58	│	│			
26	.9998	.9981	59	1.0096	1.0767			
27	.9973	.9673	60	1.0050	1.0404			
28	1.0004	1.0028	61	│	│			
29	.9853	.8828	62	│	│			
30	1.0025	1.0197	63	1.0050	1.0404			
31	1.0025	1.0197	64	1.0119	1.0953			
32	1.0036	1.0391	65	1.0107	1.0856			
33	1.0000	.9776	66	1.0050	1.0404			
34	.9997	.9975	67	1.0050	1.0404			
35	1.0043	1.0340	70	1.0134	1.1074			
36	1.0017	.9911	72	1.0143	1.1141			
37	1.0307	1.2452	73	│	│			
38	1.0233	1.1861	75	│	│			
39	1.0025	1.0197	76	│	│			

TABLE 2.5

PLANTS INVENTORIED IN DETAIL

Company	State/County
BP Oil Company	Pennsylvania/Delaware
Sun Oil Company	Pennsylvania/Delaware
3-M Company	Pennsylvania/Bucks
Gulf Oil Company	Pennsylvania/Philadelphia
Philadelphia Electric Company	Pennsylvania/Delaware
Delmarva Power Company	Delaware/New Castle
Getty Oil Company	Delaware/New Castle
Public Service Electric and Gas Company (two plants)	New Jersey/Burlington and Mercer
Atlantic City Electric Company (Penns Grove)	New Jersey/Salem
Texaco, Inc.	New Jersey/Gloucester
E. I. Dupont (Deep Water)	New Jersey/Salem

PROJECTION YEAR INVENTORY DEVELOPMENT

The inventory for 1987 was developed by modifying the 1979 base year inventory to account for expected growth or emission reductions. The sources of information for these modifications in the order each was considered are as follows:

- SIP revision regulations
- Information from plant visits
- Employment/population forecasts

All of the information obtained on industrial growth patterns indicated that 1979 through 1987 would, in general, be a period of static activity for those industrial categories responsible for the major portion of the inventoried emissions.

SIP Revisions

Each agency provided information developed for its 1982 Ozone SIP revision that pertained to growth and future year emissions. The following subsections discuss the data used to generate the 1987 masterfile in each area.

Delaware

DNREC supplied ES with a list of plants and, when possible, emission points at a plant along with the emission reductions as required by the applicable regulations. In general, most of the reductions come from surface coating and degreasing operations. The remainder involved emission reductions from refineries, primarily controls on wastewater separators. Two boilers at Delaware Power's Edgemoor plant are converting from oil to coal. Differences in VOC and NO_x emissions are, however, expected to be insignificant. Therefore, no changes were made for these boilers.

Pennsylvania

DER supplied ES with emission reductions by plant for four of the five Pennsylvania counties. However, there were no emission point-specific reductions provided. At the time of the study, the plants had not submitted to DER the plans or schedules identifying the specific emission points that would be controlled in order to meet the required overall plant emission reduction. From DER's information, most of the reductions will come from surface coating and printing operations with the remainder involving various storage tanks.

AMS provided ES with emission reductions by plant and point for VOC and NO_x within Philadelphia County. Reductions in VOC emissions resulted from regulations on fugitive and storage tank losses at petroleum refining operations. Other VOC reductions reflect controls on surface coating, rubber, and chemical operations. A new catalytic cracking unit has been added to the ARCO refinery. AMS personnel provided estimates of the changes in plant-wide emissions that resulted when the unit began full time operation.

New Jersey

DEP provided ES with a table of 1987 estimated VOC emissions for all major facilities in the New Jersey portion of the Philadelphia AQCR. No information concerning emission point reductions was available. The emission reduction expected at each plant is identified in relation to its 1980 emissions. The bulk of the emission reductions is attributable to controls at petroleum refining operations and fabricated metal product manufacturers.

Plant Visits

Those sources with either VOC or NO_x emissions greater than 5,000 tons per year generally provided very specific information about operations in 1987. The power plants were better able to supply projections for specific emission points. The refineries provided good estimates of refinery throughputs in future years. The data for these plants were incorporated as projection factors to the base year inventory for the plant or, if possible, for the individual emission points. In each case, the factor was applied to both the operating rate or throughput and the emissions to indicate that the emission change was the result of some variation in operating characteristics. Because the Philadelphia AQCR is a nonattainment area for oxidants, plant VOC emission increases were limited to 50 tons per year.

In order to determine if any new power plants were scheduled to come online in the study area through 1987, the power plants that were visited and the participating agencies were questioned. Additionally, the Department of Energy publication DOE/FERC-0004/1, Status of Coal Supply Contracts for New Electric Generating Units, was reviewed. No new power plants were identified by these information sources.

Employment/Population Data

In order to fulfill the requirement of producing a 1979 base year as well as a 1987 projection year inventory, a set of projection factors for at least two- and in some cases four-digit SIC codes for each county in the study area was developed. Information was obtained from the planning agencies which had industrial activity projections for any of the 11 counties. Table 2.6 indicates the information sources available for each county.

Data on growth were available in two different forms. A majority of the data sources, DVRPC for example, provided information on employment totals by county. This was then used as a surrogate parameter for developing projection factors. The other data sources, e.g., SIPs, had already calculated projection factors from a variety of parameters. Additionally, different degrees of specificity were available from the data sources. DVRPC provided data for ranges of all two-digit SIC codes, whereas the Delaware Employment Security Commission's data were for certain two- and four-digit SIC codes.

The years for which base and projection data were available varied among data sources. DVRPC's base year was 1970 with a projection year

TABLE 2.6

INFORMATION SOURCES OF INDUSTRIAL GROWTH DATA

State	County	Source
Pennsylvania	Bucks	1, 2, 3, 4
	Chester	1, 2, 3, 4
	Delaware	1, 2, 3, 4
	Montgomery	1, 2, 3, 4
	Philadelphia	1, 2, 3, 4
New Jersey	Burlington	2, 3, 5, 6
	Camden	2, 3, 5, 6
	Gloucester	2, 3, 5, 6
	Mercer	2, 5, 6
	Salem	5, 6, 7
Delaware	New Castle	7, 8

1. Pennsylvania Department of Environmental Resources' 1979 State Implementation Plan Revision.
2. Delaware Valley Regional Planning Commission - Year 2000 Census Tract Printout, September, 1977.
3. Pennsylvania Department of Labor and Industry - Pennsylvania Occupational Projections, Philadelphia SMSA.
4. Pennsylvania Office of State Planning and Development, Philadelphia Labor Market.
5. New Jersey Department of Environmental Protection's 1979 State Implementation Plan Revision.
6. OBERS Series E.
7. Delaware Employment Security Commission.
8. Delaware Department for Natural Resources and Environmental Control's 1979 State Implementation Plan Revision.

of 2000. The Pennsylvania OSPD data years were 1974, 1980, 1985, and 1990. The OBERS Series E data were for 1970, 1975, 1980, 1985, 1990, 1995, and 2000. The Pennsylvania Occupational Projections were for 1974 and 1985. The Delaware Employment Security Commission provided data for 1970, 1974, and 1985. The SIP revisions all provided factors to 1982 and 1987 from the base year of each state's inventory.

Projection data from each source were first used to calculate projection factors for 1979 and 1987 for each appropriate county for the finest resolution of SIC codes available. The projection factors were calculated in reference to the year of record of the baseline inventory supplied by each control agency. The projection factors were either interpolated or extrapolated for the years of interest from the years for which information was available for each of the various data sources. After the factors were compiled by county and SIC code, a selection was made of the most appropriate factor for each SIC code. The choice of factors was restrained by two bounds. First, the factors generally had to agree with the projection factors presented in each SIP revision. In the SIPs, a single factor was typically applied to the entire point source inventory. The second bound was the DVRPC projections which provided data on 12 ranges of two-digit SIC codes. These 12 ranges encompassed the entire set of SIC codes. Where other data sources did not include a particular two-digit SIC code category, the DVRPC factor for the range that included that category was adopted. The use of the DVRPC factors as guides for overall growth is warranted since they are accepted for 208 planning purposes in the nine counties they represent.

Once the projection factors were selected for the various SIC code categories, counties, and projection years, the factors were submitted to the state and local agencies for review. Certain adjustments were made after consultations with the appropriate state and local agencies. The 1979 SIP revision for Delaware projected no growth for the petroleum refining industry, SIC code 29XX, through 1987 because of the prohibition on this type of new industry by the Coastal Zone Law. Therefore, the New Castle County projection factor for the 29XX SIC code category was revised to 1.0000 for 1987. Several SIC categories for New Castle County had no available projection information. However, since there were no emissions for those categories in New Castle County, no projection factors were required. The final projection factors for 1979 and 1987 are presented by county in Tables 2.1 through 2.4 and 2.7 through 2.13. As previously mentioned, VOC emission increases were limited to 50 tons for each plant because of the ozone nonattainment status of the Philadelphia AQCR.

EMISSIONS SUMMARY

A summary of the point source inventory by plant is not presented since several hundred plants exist in the Philadelphia AQCR. However, emissions of VOC and NO_x are provided for selected categories. Table 2.14 lists the SCCs associated with each emission category. The category of "Other Solvent Use" includes degreasing, dry cleaning, graphic arts, printing, and miscellaneous solvent use. Tables 2.15 through 2.26 present the emissions by category for each county and totals for the

TABLE 2.7

PROJECTION FACTORS FOR 1987
PHILADELPHIA COUNTY, PENNSYLVANIA
BASE YEAR 1979

SIC	Factor	SIC	Factor	SIC	Factor
1	.8759	39	1.0092	75	│
2	│	40	1.0576	76	│
7	│	41	1.0324	78	│
8	│	42	.9680	79	│
9	.8759	43	1.0324	80	│
10	.9541	44	│	81	│
11	│	45	│	82	│
12	│	46	│	83	│
13	│	47	1.0324	84	│
14	.9541	48	.9748	86	│
15	1.0430	49	1.0388	88	│
16	1.0430	50	1.0469	89	1.0875
17	1.0971	51	1.0469	91	1.1298
20	.9648	52	1.0501	92	│
21	1.0092	53	1.0501	93	│
22	.8887	54	1.0501	94	│
23	.9961	55	.9076	95	│
24	1.0252	56	1.0501	96	1.1298
25	1.0252	57	│	97	.9676
26	.9986	58	│		
27	.9726	59	1.0501		
28	1.0025	60	1.0366		
29	.8880	61	│		
30	1.0092	62	│		
31	1.0092	63	1.0366		
32	1.0384	64	1.0839		
33	.9726	65	1.0754		
34	.9975	66	1.0366		
35	1.0313	67	1.0366		
36	.9724	70	1.0942		
37	1.1995	72	1.0875		
38	1.1614	73	│		

TABLE 2.8

PROJECTION FACTORS FOR 1987
BURLINGTON COUNTY, NEW JERSEY
BASE YEAR 1979

SIC	Factor	SIC	Factor	SIC	Factor
1	.8722	40	1.0588	78	|
2	|	41	1.1159	79	|
7	|	42	.9672	80	|
8	|	43	1.1159	81	|
9	.8722	44	|	82	|
10	.9673	45	|	83	|
11	|	46	|	84	|
12	|	47	1.1159	86	|
13	|	48	.9740	88	|
14	.9673	49	1.0401	89	1.2460
15	1.0514	50	1.1200	91	1.0837
16	1.0514	51	1.1200	92	|
17	1.0991	52	1.0956	93	|
20	1.0715	53	1.0956	94	|
21	1.0000	54	1.0956	95	|
22	1.0715	55	.9055	96	1.0837
23	.8237	56	1.0956	97	.9561
24	1.0715	57	|		
25	.9434	58	|		
26	1.0715	59	1.0956		
27	1.0715	60	1.0884		
28	1.0367	61	|		
29	1.0715	62	|		
30	1.0000	63	1.0884		
31	1.0000	64	1.0856		
32	1.0391	65	1.0770		
33	1.0715	66	1.0884		
34	1.3879	67	1.0884		
35	.9984	70	1.0964		
36	1.0555	72	1.2460		
37	.9984	73	|		
38	1.1651	75	|		
39	1.0715	76	|		

TABLE 2.9

PROJECTION FACTORS FOR 1987
CAMDEN COUNTY, NEW JERSEY
BASE YEAR 1979

SIC	Factor	SIC	Factor	SIC	Factor
1	.8511	40	1.0588	78	│
2	│	41	1.0340	79	│
7	│	42	.9762	80	│
8	│	43	1.0588	81	│
9	.8511	44	│	82	│
10	.9720	45	│	83	│
11	│	46	│	84	│
12	│	47	1.0588	86	│
13	│	48	.9740	88	│
14	.9720	49	1.0401	89	1.2023
15	1.0578	50	1.0309	91	1.1565
16	1.0578	51	1.0309	92	│
17	1.0991	52	1.0894	93	│
20	1.0113	53	│	94	│
21	.9410	54	1.0894	95	│
22	1.0113	55	.9055	96	1.1565
23	.8237	56	1.0894	97	1.0000
24	1.0113	57	│		
25	.9434	58	│		
26	1.0113	59	1.0894		
27	1.0113	60	1.0377		
28	1.0300	61	│		
29	1.0113	62	│		
30	.9410	63	1.0377		
31	.9410	64	1.0856		
32	1.0391	65	1.0770		
33	1.0113	66	1.0377		
34	.8788	67	1.0377		
35	.9984	70	1.0964		
36	1.0555	72	1.2023		
37	.9984	73	│		
38	1.1651	75	│		
39	1.0113	76	│		

TABLE 2.10

PROJECTION FACTORS FOR 1987
GLOUCESTER COUNTY, NEW JERSEY
BASE YEAR 1979

SIC	Factor	SIC	Factor	SIC	Factor
1	.8784	40	1.0588	78	│
2	│	41	1.0660	79	│
7	│	42	.9672	80	│
8	│	43	1.0660	81	│
9	.8784	44	│	82	│
10	.9596	45	│	83	│
11	│	46	│	84	│
12	│	47	1.0660	86	│
13	│	48	.9740	88	│
14	.9596	49	1.0401	89	1.3410
15	1.0744	50	1.0665	91	1.1940
16	1.0744	51	1.0665	92	│
17	1.0991	52	1.1900	93	│
20	1.0380	53	│	94	│
21	1.2238	54	1.1900	95	│
22	1.0380	55	.9055	96	1.1940
23	.8237	56	1.1900	97	1.0000
24	1.0380	57	│		
25	.9434	58	│		
26	1.0380	59	1.1900		
27	1.0380	60	1.0912		
28	1.0300	61	│		
29	1.0380	62	│		
30	1.2238	63	1.0912		
31	1.2238	64	1.0857		
32	1.0391	65	1.0770		
33	1.0380	66	1.0912		
34	1.1559	67	1.0912		
35	.9984	70	1.0964		
36	1.0555	72	1.3410		
37	.9984	73	│		
38	1.1651	75	│		
39	1.0380	76	│		

TABLE 2.11

PROJECTION FACTORS FOR 1987
MERCER COUNTY, NEW JERSEY
BASE YEAR 1979

SIC	Factor	SIC	Factor	SIC	Factor
1	.8756	40	1.0693	78	│
2	│	41	│	79	│
7	│	42	│	80	│
8	│	43	│	81	│
9	.8756	44	│	82	│
10	.9553	45	│	83	│
11	│	46	│	84	│
12	│	47	1.0693	86	│
13	│	48	1.0788	88	│
14	.9553	49	1.0693	89	│
15	1.0652	50	1.0691	91	│
16	1.0652	51	1.0691	92	│
17	1.0652	52	1.0932	93	│
20	1.0453	53	│	94	│
21	│	54	│	95	│
22	│	55	│	96	1.1125
23	│	56	│	97	1.0000
24	│	57	│		
25	│	58	│		
26	1.0453	59	1.0932		
27	1.2735	60	1.0593		
28	1.0590	61	│		
29	1.0453	62	│		
30	│	63	│		
31	│	64	│		
32	│	65	│		
33	│	66	│		
34	1.0453	67	1.0593		
35	.9071	70	1.1125		
36	1.0326	72	1.1125		
37	1.0000	73	│		
38	1.0453	75	│		
39	1.0453	76	│		

TABLE 2.12

PROJECTION FACTORS FOR 1987
SALEM COUNTY, NEW JERSEY
BASE YEAR 1979

SIC	Factor	SIC	Factor	SIC	Factor
1	.7273	40	.8335	75	1.2199
2		41	1.1480	76	1.2454
7		42	1.0883	78	1.1322
8		43	.9273	7830	1.0393
9	.7273	44		79	1.1322
10	1.0000	45		7990	1.1322
11		46		80	1.2634
12		47	.9273	8060	1.2490
13		48	1.1233	81	1.1905
14	1.0000	49	1.1399	82	1.0380
15	2.0390	50	1.1375	8211	.9947
16		51	1.1375	8221	.4817
17	2.0390	52	1.0327	83	1.1322
20	.9319	53	1.2396	84	1.1921
21	.9394	54	1.1980	86	1.1222
22	.8039	55	1.1303	88	1.1322
23	1.0084	56	1.1625	89	1.1322
24	.9014	57	1.1126	91	1.1861
25	1.0000	58	1.2493	92	1.1322
26	1.1271	59	1.1450	93	
27	1.0559	60	1.2884	94	
28	1.0359	61	1.0000	95	
29	1.0634	62	1.0000	96	
30	.9732	63	1.1866	97	1.1322
31	.9506	64	1.0000		
32	.9887	65	1.1996		
33	1.0129	66	1.0000		
34	.9564	67	1.0000		
35	1.0230	70	1.1573		
36	1.0559	72	1.1322		
37	1.3014	7216	1.1329		
38	1.0255	7231	1.1009		
39	1.0000	73	1.1322		
		7390	1.2496		

TABLE 2.13

PROJECTION FACTORS FOR 1987
NEW CASTLE COUNTY, DELAWARE
BASE YEAR 1979

SIC	Factor	SIC	Factor
20	.8890	55	1.1252
22	.6402	56	1.1536
23	1.0398	57	1.1060
24	.9182	58	1.1934
26	1.1216	59	1.1387
27	1.0562	60	1.2702
28	1.0348	63	1.1536
29	1.0000	65	1.2439
30	.9367	70	1.3378
31	.4240	7216	1.0135
32	.9936	7231	1.0967
33	1.0412	7390	1.2361
34	1.0107	75	1.2076
35	.9787	76	1.2887
36	1.0533	7830	.9933
37	1.1031	7990	1.1550
38	1.3968	80	1.2489
39	1.0000	8060	1.2347
40	.8300	81	1.2389
41	1.1920	82	1.0604
42	1.0860	8211	.9943
48	1.1202	8221	.4560
49	1.1892	84	1.3449
50	1.1323	86	1.1152
51	1.1323	91	1.1771
52	1.0754		
53	1.2268		
54	1.1877		

TABLE 2.14

EMISSION CATEGORIES BY SOURCE CLASSIFICATION CODE (SCC)

Category	SCC I	II	III	IV
Storage, Transportation, and Marketing of Petroleum Products	3	10	XXX	XX
	4	03	XXX	XX
	4	04	XXX	XX
	4	06	002	XX
Industrial Processes	3	01	XXX	XX
	3	02	019	XX
	3	04	XXX	XX
	3	05	XXX	XX
	3	06	XXX	XX
	3	08	XXX	XX
	3	30	002	XX
Industrial Surface Coating	4	02	XXX	XX
Other Solvent Use	4	01	XXX	XX
	4	05	XXX	XX
	4	90	999	99
Fuel Combustion	1	XX	XXX	XX

TABLE 2.15

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES

County: New Castle, Delaware

	Emissions (tons/year)			
	VOC		NO_x	
Category	1979	1987	1979	1987
Storage, Transportation, and Marketing of VOC	974	1,354		
Industrial Processes	10,408	5,338	1,204	1,207
Industrial Surface Coating	8,165	4,433		
Other Solvent Use	5	23		
Fuel Combustion	466	558	23,581	24,813
All Other[a]	3	3	4	4
Total	20,021	11,709	24,789	26,024

[a] Solid waste disposal.

TABLE 2.16

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES

County: Burlington, New Jersey

Category	Emissions (tons/year)			
	VOC		NO_x	
	1979	1987	1979	1987
Storage, Transportation, and Marketing of VOC	263	146		
Industrial Processes	158	77	232	239
Industrial Surface Coating	230	205		
Other Solvent Use				
Fuel Combustion[a]	69	72	4,641	4,811
All Other[b]	6	2		
Total	726	502	4,873	5,050

[a] Includes 1 ton VOC and 160 tons NO_x in 1979 and 1 ton VOC and 166 tons NO_x in 1987 from Stationary Internal Combustion Engines.

[b] Solid waste disposal.

TABLE 2.17

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES

County: Camden, New Jersey

	Emissions (tons/year)			
	VOC		NO_x	
Category	1979	1987	1979	1987
Storage, Transportation, and Marketing of VOC	1,065	619		
Industrial Processes	534	288	164	169
Industrial Surface Coating	499	302		
Other Solvent Use				
Fuel Combustion	233	184	2,640	2,706
All Other				
Total	2,331	1,393	2,804	2,875

TABLE 2.18

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES

County: Gloucester, New Jersey

Category	Emissions (tons/year) VOC 1979	VOC 1987	NO_x 1979	NO_x 1987
Storage, Transportation, and Marketing of VOC	17,543	9,293		
Industrial Processes	1,267	718	932	968
Industrial Surface Coating	3,327	1,173		
Other Solvent Use				
Fuel Combustion[a]	522	222	10,486	10,770
All Other				
Total	22,659	11,406	11,418	11,738

[a] Includes 413 tons NO_x in 1979 and 430 tons in 1987 from Stationary Internal Combustion Engines.

TABLE 2.19

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES

County: Mercer, New Jersey

	Emissions (tons/year)			
	VOC		NO_x	
Category	1979	1987	1979	1987
Storage, Transportation, and Marketing of VOC				
Industrial Processes	33	15		
Industrial Surface Coating	213	108		
Other Solvent Use	38	19		
Fuel Combustion	133	141	14,136	15,115
All Other				
Total	417	283	14,136	15,115

TABLE 2.20

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES

County: Salem, New Jersey

Category	Emissions (tons/year)			
	VOC		NO_x	
	1979	1987	1979	1987
Storage, Transportation, and Marketing of VOC	445	252		
Industrial Processes	5,285	2,759	451	456
Industrial Surface Coating	3	2		
Other Solvent Use	68	34		
Fuel Combustion[a]	205	205	9,870	9,956
All Other[b]	20	11		
Total	6,026	3,263	10,321	10,412

[a] Includes 14 tons VOC and 239 tons NO_x in 1979 and 16 tons VOC and 265 tons NO_x in 1987 from Stationary Internal Combustion Engines.

[b] Solid waste incineration.

TABLE 2.21

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES

County: Bucks, Pennsylvania

	Emissions (tons/year)			
	VOC		NO_x	
Category	1979	1987	1979	1987
Storage, Transportation, and Marketing of VOC				
Industrial Processes	5,049	2,269	3,331	3,259
Industrial Surface Coating	13,765	7,599	13[b]	13[b]
Other Solvent Use	788	188		
Fuel Combustion[a]	214	220	3,730	3,770
All Other				
Total	19,816	10,276	7,074	7,042

[a] Includes 96 tons VOC and 1,192 tons NO_x in 1979 and 102 tons VOC and 1,253 tons NO_x in 1987 from Stationary Internal Combustion Engines.

[b] Represents oven emissions.

TABLE 2.22

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES

County: Chester, Pennsylvania

	Emissions (tons/year)			
	VOC		NO_x	
Category	1979	1987	1979	1987
Storage, Transportation, and Marketing of VOC	238	240		
Industrial Processes	84	86	655	655
Industrial Surface Coating	4,540	2,193	2	2
Other Solvent Use	2,613	980		
Fuel Combustion	94	98	7,841	8,207
All Other				
Total	7,569	3,597	8,498	8,864

TABLE 2.23

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES

County: Delaware, Pennsylvania

	Emissions (tons/year)			
	VOC		NO_x	
Category	1979	1987	1979	1987
Storage, Transportation, and Marketing of VOC	13,645	9,897		
Industrial Processes	13,759	10,446	2,840	2,939
Industrial Surface Coating	3,746	1,475	32[c]	32[c]
Other Solvent Use				
Fuel Combustion[a]	320	299	22,697	23,207
All Other[b]	169	175	376	395
Total	31,639	22,292	25,945	26,573

[a] Includes 1 ton VOC and 44 tons NO_x in 1979 and 1 ton VOC and 65 tons NO_x in 1987 from Stationary Internal Combustion Engines.

[b] Solid waste disposal.

[c] Represents oven emissions.

TABLE 2.24

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES

County: Montgomery, Pennsylvania

Category	Emissions (tons/year)			
	VOC		NO_x	
	1979	1987	1979	1987
Storage, Transportation, and Marketing of VOC	69	70		
Industrial Processes	6,485	3,416	1,010	999
Industrial Surface Coating	1,065	531		
Other Solvent Use	518	124		
Fuel Combustion	15	9	1,333	1,263
All Other[a]	5	5	5	5
Total	8,157	4,155	2,348	2,267

[a] Solid waste disposal.

TABLE 2.25

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES

County: Philadelphia, Pennsylvania

	Emissions (tons/year)			
	VOC		NO_x	
Category	1979	1987	1979	1987
Storage, Transportation, and Marketing of VOC	1,841	1,252	4	4
Industrial Processes	10,541	4,357	5,760	6,649
Industrial Surface Coating	4,530	3,316	200[c]	219[c]
Other Solvent Use	1,042	1,044		
Fuel Combustion[a]	336	327	22,491	23,454
All Other[b]	342	408	573	1,371
Total	18,632	10,704	29,028	31,697

[a] Includes 31 tons VOC and 505 tons NO_x in 1979 and 31 tons VOC and 534 tons NO_x in 1987 from Stationary Internal Combustion Engines.

[b] Solid waste disposal.

[c] Represents oven emissions.

TABLE 2.26

EMISSIONS FROM SELECTED POINT SOURCE CATEGORIES

County: Philadelphia AQCR

Category	Emissions (tons/year)			
	VOC		NO_x	
	1979	1987	1979	1987
Storage, Transportation, and Marketing of VOC	36,083	23,123	4	4
Industrial Processes	53,603	29,769	16,579	17,540
Industrial Surface Coating	40,083	21,337	247[c]	266[c]
Other Solvent Use	5,072	2,412		
Fuel Combustion[a]	2,607	2,335	123,446	128,072
All Other[b]	545	604	958	1,775
Total	137,993	79,580	141,234	147,657

[a] Includes 143 tons VOC and 2,553 tons NO_x in 1979 and 151 tons VOC and 2,713 tons NO_x in 1987 from Stationary Internal Combustion Engines.

[b] Solid waste disposal.

[c] Represents oven emissions.

entire study area for 1979 and 1987. In addition, Table 2.27 summarizes point source emissions of TSP, SO_2, NO_x, VOC, and CO for 1979 and 1987 by county.

TABLE 2.27

SUMMARY OF POINT SOURCE EMISSIONS

County, State	Tons/Year									
	TSP		SO_2		NO_x		VOC		CO	
	1979	1987	1979	1987	1979	1987	1979	1987	1979	1987
New Castle, DE	7,690	7,859	89,138	95,281	24,789	26,024	20,021	11,709	8,257	8,256
Burlington, NJ	35,749[a]	37,056	1,494	1,546	4,873	5,050	726	502	305	315
Camden, NJ	4,105	4,233	4,631	4,767	2,804	2,875	2,331	1,393	153	153
Gloucester, NJ	3,974	3,929	16,774	17,246	11,418	11,738	22,659	11,406	744	760
Mercer, NJ	1,196	1,264	19,507	20,859	14,136	15,115	417	283	462	494
Salem, NJ	58,926[a]	60,990	21,768	21,877	10,321	10,412	6,026	3,263	1,803	1,860
Bucks, PA	13,504	13,171	14,261	13,842	7,074	7,042	19,816	10,276	61,193	59,854
Chester, PA	4,306	4,279	18,333	19,192	8,498	8,864	7,569	3,597	7,253	7,128
Delaware, PA	9,987	10,305	67,430	68,560	25,945	26,573	31,639	22,292	5,434	5,650
Montgomery, PA	12,013	11,434	4,573	3,468	2,348	2,267	8,157	4,155	667	493
Philadelphia, PA	6,287	5,877	31,132	31,956	29,028	31,697	18,632	10,704	10,243	10,554
AQCR Totals	157,737	160,397	289,041	298,594	141,234	147,657	137,993	79,580	96,514	95,517

[a] TSP emissions known to be much too high but were not corrected since emphasis was on VOC and NO_x.

CHAPTER 3

ANNUALIZED AREA SOURCE INVENTORIES

INTRODUCTION

This chapter documents the methodologies used to compile gridded, annualized area source inventories for the Philadelphia AQCR. Table 3.1 identifies the area source categories considered and the order in which they are discussed in this chapter. The highway vehicle emission inventory was developed by DVRPC under another work assignment. A separate report addresses the highway vehicle inventorying effort.

The documentation for each area source category in this chapter has been divided into four parts. The first part defines the category and describes how the base-year activity parameters were calculated. Next, projection factors for generating 1987 activity parameters are discussed. County activity parameter values for 1979 and 1987 are provided on NEDS area source input forms in Appendix A. Emission factors are then listed for each category and their sources documented. Finally, allocation data sources and methodologies are discussed. Where methodologies differ from state to state, each is considered individually.

A computerized procedure was employed to generate gridded annual emissions by pollutant. First, county activity parameters were allocated to the subcounty grids. Second, the emission factor file was applied to generate annual emissions. County level activity was allocated to individual grids by one of two procedures, which are discussed later in this section. Allocation factors were developed separately for the 1979 and 1987 inventory years.

In the development of the area source inventory, ES utilized existing inventories to the extent possible. These included the Development of Particulate, SO_2, and VOC Emissions Inventories and Source-Receptor Relationships for Delaware (Reference 1), Regional Emission Inventory and Sulfur Dioxide Alternatives for the Metropolitan Philadelphia AQCR (Reference 2), and the 1979 State Implementation Plans (SIPs) for the states of New Jersey, Pennsylvania, and Delaware. However, a significant portion of the inventory was prepared by applying more recent data and more up-to-date methodologies. In instances where existing inventory data were adequate, the data bases and methodologies were researched and documented for this study.

Other sources of information included the Air Management Services (AMS) of the Philadelphia Department of Public Health, the Pennsylvania

TABLE 3.1

CATEGORIES OF AREA SOURCES

1. Fuel Use
2. Gasoline Marketing
3. Solvent Use
4. Other Small Industrial Processes
5. Dry Cleaning
6. Pesticides
7. Cutback Asphalt Paving
8. Natural Gas Leaks
9. Agricultural Equipment
10. Construction Equipment
11. Industrial Equipment
12. Small Gasoline Engines
13. Aircraft
14. Vessels
15. Railroads
16. Forest Fires
17. Agricultural Burning
18. Prescribed Burning
19. On-Site Incineration
20. Open Burning
21. Structural Fires

Department of Environmental Resources (PennDER), the Delaware Valley Regional Planning Commission (DVRPC), the Pennsylvania Department of Transportation (PennDOT), the Salem County Planning Board (SCPB) and the Wilmington Area Planning and Coordinating Council (WILMAPCO). In addition, data were obtained from the forestry, agriculture, and recreation agencies in each of the inventoried states.

The annualized area source emission inventory summarized by county for 1979 is shown in Table 3.2. Other portions of this study specific to area sources include pollutant profiles for VOC and NO_x (Chapter 4) and temporal factors for each hour of a typical weekday during the oxidant season (Chapter 5).

Allocation Parameters

County activity parameters were allocated to a grid system consisting of 502 square grids, each of which is 5 kilometers on a side (Figure 3.1). The study area is comprised of eleven counties: Philadelphia, Bucks, Chester, Delaware, and Montgomery Counties in Pennsylvania; Gloucester, Burlington, Camden, Mercer, and Salem Counties in New Jersey; and New Castle County in Delaware. DVRPC provided population and two-digit SIC employment for census tracts in nine of the eleven AQCR counties. The exceptions are Salem County, New Jersey, and New Castle County, Delaware. Population figures were found for these two counties on the municipal level from the SCPB and the Delaware DOT traffic zone level from WILMAPCO. Two-digit SIC employment was also obtained by municipality and traffic zone but from the New Jersey Department of Labor and Industry, Division of Planning and Research, Bureau of Operational Statistics and Reports, and WILMAPCO, respectively.

In order to make use of the allocation data supplied by the planning agencies, it was necessary to interpolate the data to each inventory year. Because only the relative percentage of each parameter within the subdivisions of each separate county was important, a linear approach to interpolation was used.

Census tract data from DVRPC were linearly interpolated to the inventory years (1979 and 1987) using the "2000 plan", since census tract data were available in this form only. The data obtained in this manner for each study year were transformed to the area source grid system using an ES computer program, AQZTOGR. Basically, this program transforms input parameters on the basis of the portion of the census tract that lies within each grid. Uniformity of distribution of employment and population within each census tract was assumed. The same procedure was applied in the two counties for which SCPB and WILMAPCO data were used.

The allocation parameters linearly interpolated from DVRPC census tract data included: population, commercial employment, construction employment, agricultural employment, manufacturing employment, total employment, four categories of vehicle-miles travelled, and occupied households. The grid allocation parameters for 1979 are shown in Appendix B, along with those obtained from SCPB and WILMAPCO.

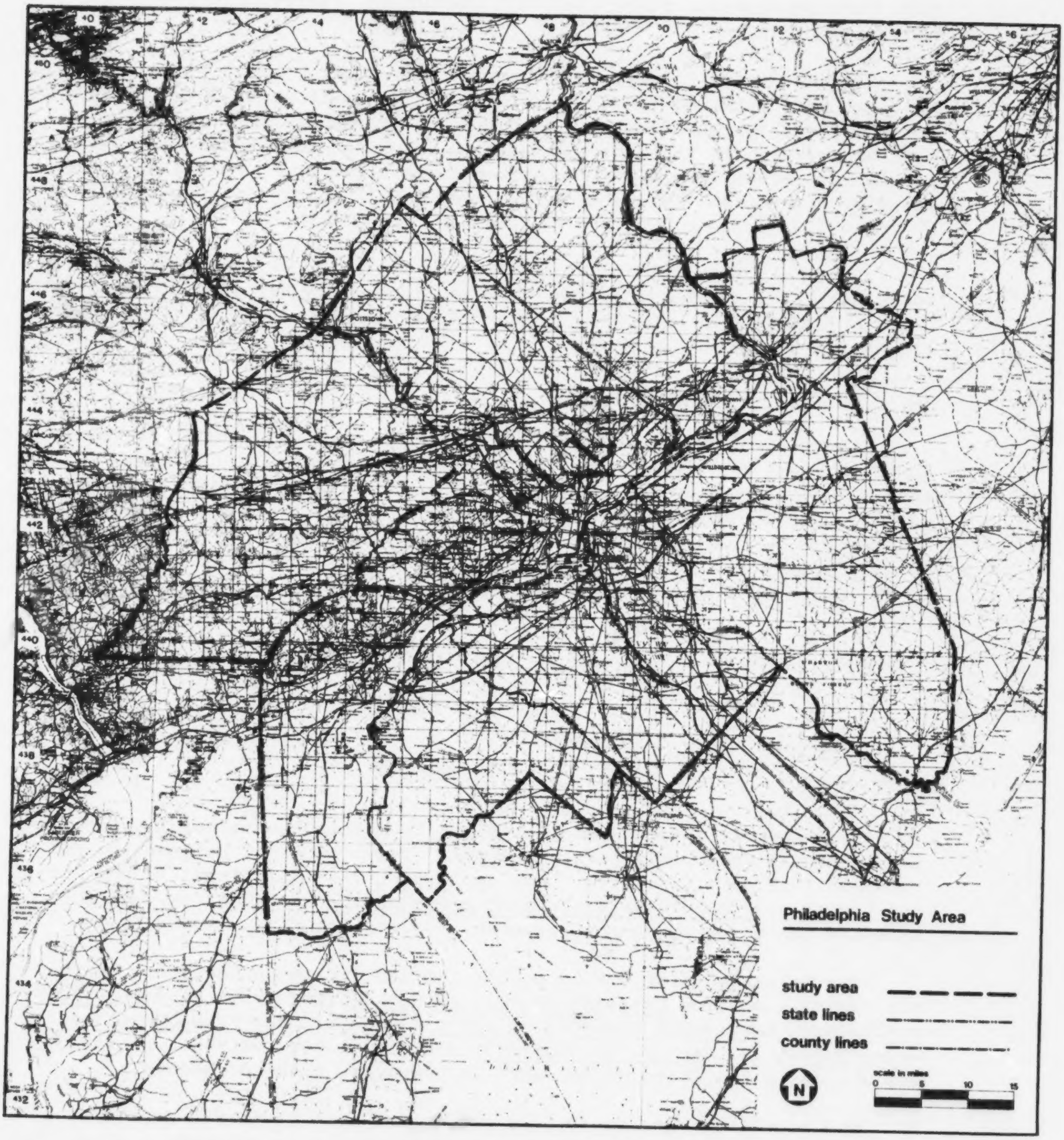
TABLE 3.2

SUMMARY OF AREA SOURCE EMISSIONS

County, State	Tons/Year									
	TSP		SO_2		NO_x		HC		CO	
	1979	1987	1979	1987	1979	1987	1979	1987	1979	1987
New Castle, DE	685	734	7,800	8,385	4,261	4,458	17,759	15,824	10,058	10,169
Burlington, NJ	974	1,313	2,472	2,538	2,892	3,079	15,903	15,868	12,058	15,687
Camden, NJ	1,235	1,319	5,296	5,582	5,585	5,970	16,023	15,233	8,109	8,522
Gloucester, NJ	397	439	3,189	3,455	2,076	2,212	7,447	7,085	6,475	7,134
Mercer, NJ	1,099	1,116	4,359	4,510	4,719	4,935	14,806	14,333	7,782	8,218
Salem, NJ	273	323	3,683	4,051	1,000	1,098	2,394	2,338	2,676	3,227
Bucks, PA	823	822	6,592	6,629	5,359	5,523	20,974	19,932	11,525	12,300
Chester, PA	845	835	4,678	4,697	4,074	4,310	12,110	11,799	9,612	10,106
Delaware, PA	1,210	1,255	8,862	9,318	6,865	7,181	16,356	14,974	9,466	9,224
Montgomery, PA	2,950	2,952	12,490	12,745	10,143	10,599	30,733	29,139	19,184	20,663
Philadelphia, PA	2,812	2,576	10,842	10,693	15,449	15,976	53,593	51,708	30,084	27,052
AQCR Totals	13,303	13,684	70,263	72,603	62,423	65,341	208,098	198,233	127,029	132,302

FIGURE 3.1

METROPOLITAN PHILADELPHIA AQCR GRID SYSTEM


Philadelphia Study Area
study area
state lines
county lines
N
scale in miles
0
5
10
15
40
42
44
46
48
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432

In Salem County, 1979 and 1987 population plus 1979 employment figures were based on municipalities. The employment figures were divided into five categories: commercial, manufacturing, agricultural, construction, and total.

For New Castle County, data from the New Castle County Planning Department were obtained through WILMAPCO. These data were based on traffic zones defined by the Delaware Department of Transportation. The allocation parameters for this area included population, commercial employment, manufacturing employment, and dwelling units. For the population and employment categories, 1979 and 1987 values were linearly interpolated from 1976 and 1995 data.

In cases where county activity levels were allocated to specific locations, this was noted in the individual category writeups. The methodology presented in this section describes the generation of surrogate allocation parameters only.

Activity Parameter Projections

County population and two-digit SIC employment data for the 1979 and 1987 inventory years were obtained for nine counties by a special interpolation process suggested by DVRPC. This process involved two plans concerning population and employment projections. Basically, the "2000 plan" was interpolated using the "208 plan." The following formula shows how 1979 and 1987 population figures were calculated for each of the nine counties of the DVRPC region:

$$\text{Population Year of Interest} = \left[(\text{2000 pop.} - \text{1970 pop.})_{\text{"2000 plan"}} \times \left(\frac{\text{pop. yr. of int.} - \text{1970 pop.}}{\text{2000 pop.} - \text{1970 pop.}} \right)_{\text{"208 plan"}} \right] + \text{1970 pop.}_{\text{"2000 plan"}}$$

The linearly interpolated Salem County population and employment projections came from two separate sources. The population information for 1979 and 1987 came from SCPB. The employment data originated in New Jersey Toward the Year 2000: Employment Projections (Reference 3), but SCPB selected the model which most favorably agreed with their estimations.

The linearly interpolated population and employment data for New Castle County came from Delaware Population Growth (Reference 4) and Revised Preliminary Employment Projections for Delaware and the Three Counties, by Major Industrial Sector, Through 1995 (Reference 5). WILMAPCO provided assistance to the State of Delaware in preparing these documents.

The population and employment categories were projected from a base year which varied from category to category and state to state. Since the base year for this study was 1979, all activity parameters are actually projections from an earlier year. The population projections resulting from this process are shown in Table 3.3. Table 3.4 shows the various employment classifications and their projections.

TABLE 3.3

POPULATION

County	Population Projections 1979	 1987	 2000
Burlington	362,679	388,256	428,500
Camden	503,841	534,574	583,000
Gloucester	205,991	225,381	256,500
Mercer	333,638	351,559	386,000
Salem	67,674	74,330	86,990
Bucks	472,803	502,153	550,000
Chester	301,727	310,517	325,000
Delaware	612,400	636,628	676,000
Montgomery	675,048	714,994	780,000
Philadelphia	1,938,900	1,947,327	1,961,000
New Castle	403,352	432,260	474,215[a]

[a] 1995 projections were used for New Castle County.

Source: Delaware Valley Regional Planning Commission, Salem County Planning Board, and Delaware Population Growth (Reference 4).

TABLE 3.4

EMPLOYMENT PROJECTIONS

County	1979 Mfg.	1979 Const.	1979 Whole-Sale	1979 Retail	1979 C/I	1987 Mfg.	1987 Const.	1987 Whole-Sale	1987 Retail	1987 C/I
Bucks	57,562	10,739	4,794	30,087	84,639	57,739	10,844	4,840	30,870	87,816
Chester	40,802	5,826	3,809	16,177	54,762	41,362	5,834	3,896	16,786	57,436
Delaware	61,417	13,500	6,917	36,554	102,654	62,546	13,664	7,221	39,172	114,535
Montgomery	118,373	25,709	18,292	53,923	158,641	120,396	26,595	18,602	57,386	170,989
Philadelphia	267,111	46,504	69,698	155,523	598,602	270,507	49,367	74,365	166,718	638,175
Burlington	25,526	5,070	3,615	22,198	60,032	26,923	5,275	3,935		65,340
Camden	47,791	9,426	10,402	34,229	97,452	48,309	9,936	10,707	37,034	108,931
Gloucester	14,395	2,326	2,033	10,425	29,138	14,864	2,469	2,146	11,937	34,212
Mercer	46,017	5,050	6,662	22,666	99,855	47,744	5,318	7,035	24,349	108,702
Salem	11,100	4,620	2,920	*	7,743	10,650	7,790	2,830	*	8,080
New Castle	59,449	15,238	46,706	*	151,006	62,574	20,219	51,415	*	177,916

* Retail and wholesale employment was considered as one category for Salem and New Castle counties.

Source: Delaware Valley Regional Planning Commission, New Jersey Toward the Year 2000: Employment Projections (Reference 3), Revised Preliminary Employment Projections for Delaware and the Three Counties, by Major Industrial Sector, Through 1995 (Reference 5).

Projection data applied to each area source category are presented in the sections that follow. The methodology presented in this section describes the generation of the most commonly used projection factors. Projection factors based on the extrapolation of historical trends are discussed for the categories where the method was applied.

1. FUEL USE

This category is split into several subcategories. These include the combustion of coal, oil, natural gas, and wood not covered in the point source inventory. Furthermore, these subcategories are classified as to whether they are residential, commercial/institutional, or industrial.

Because of the complex and varied nature of the available data, varying methodologies were used for different parts of the study area and for different subcategories. Some of the major data sources include the Regional Emission Inventory and Sulfur Dioxide Alternatives for the Metropolitan Philadelphia AQCR (Reference 2), Development of Particulate, SO_2, and VOC Emissions Inventories and Source-Receptor Relationships for Delaware (Reference 1), data acquired from Air Management Services (AMS) in Philadelphia, and data collected directly from natural gas suppliers. This category is divided into subsections to facilitate the presentation of the various methodologies.

Fuels Except Natural Gas

New Castle County

For New Castle County, Delaware, the unpublished inventory in Development of Particulate, SO_2, and VOC Emissions Inventories and Source-Receptor Relationships for Delaware (Reference 1) was used. The amount of fuel of each type used for residential heating in an average year was computed from input data provided by the 1970 Delaware Census of Housing, Detailed Housing Characteristic (Reference 6) and Delaware Population Growth (Reference 4). The input parameters include percentage of dwelling units per structure, average number of degree-days per year, and the number of dwelling units per structure by county. This procedure uses the same algorithm suggested in Guidelines for Air Quality Maintenance Planning and Analysis (Reference 7).

Activity parameters generated for New Castle County using Reference 1 were: residential and commercial/institutional anthracite coal and distillate oil, commercial/institutional residual oil, and residential wood. The commercial/institutional and light industrial fuel categories represented only a fraction of the total fuel usage for these categories since most of their usage appears on the point source inventory.

Philadelphia County

The major source for all area source data in Philadelphia County was Air Management Services (AMS). AMS provided detailed information for the use of anthracite coal, distillate oil, and residual oil by subcategory (residential, commercial/institutional, or industrial). These figures represented area sources only. AMS personnel conducted a fuel balance for point and area sources in order to avoid any double-counting of fuels.

Other Counties

For the other nine counties, activity parameters from the Regional Emission Inventory and and Sulfur Dioxide Alternatives for the Metropolitan Philadelphia AQCR (Reference 2) were used. The activity parameters were calculated based on procedures given in Guidelines for Air Quality Maintenance Planning and Analysis (Reference 7). The activity parameters generated were: all residential anthracite and distillate oil use, area source commercial/institutional use for the same fuels, and bituminous coal use for the light industrial (area source) category. Fuel usage by point sources was accounted for to ensure that no double-counting of fuel use occurred in the area source inventory.

The activity parameters used in this section were included in other inventories. Emissions calculations in both the Pennsylvania and the New Jersey SIPs for the fuel category were based on the Regional Emission Inventory and Sulfur Dioxide Alternatives for the Metropolitan Philadelphia AQCR (Reference 2).

Natural Gas

Natural gas usage in Pennsylvania was obtained from Philadelphia Electric Company, which supplies all the natural gas for the five-county area. The most recent 12-month period was chosen (1978 to 1979), and totals were divided into three subcategories - residential, commercial/institutional, and industrial for each county. Next, point source natural gas usage totals were subtracted from the total figures, and the resulting numbers were used as area source activity parameters.

A similar process was followed for the New Jersey portion of the study area. Detailed information was acquired from Public Service Electric and Gas Company of Newark, New Jersey. The data were as recent as May 1979. The New Castle County, Delaware, natural gas usage totals were found using the same methodology as for other fuels in this area.

Projections

Since several methodologies were used in this section, the projections were performed from different base years to the three required inventory years. First, some general assumptions were made with respect to coal and oil use. It was evident from discussions with local officials at AMS and PennDER that residential coal use is decreasing in the Philadelphia AQCR. From data acquired in Energy Data Reports, Coal - Pennsylvania Anthracite for the Calendar Year 1977 (Reference 8), the average decrease in residential coal use in the state of Pennsylvania during the middle to late seventies was 11.5 percent per year. Therefore, all data on residential coal use (base year 1974) in Regional Emission Inventory and Sulfur Dioxide Alternatives for the Metropolitan Philadelphia AQCR (Reference 2) were decreased by this amount through 1987. For New Castle County, 1976 was the base year in which the coal use algorithm was applied. Area source commercial/institutional and industrial coal use was assumed to increase in accordance with commercial or manufacturing employment until 1979 and remain constant thereafter.

Oil use in 1979 was determined by using available projection factors. The New Jersey and Pennsylvania SIPs both suggested using population as a projection factor for residential fuel use, so these were used for projecting residential oil use. In New Castle County, 1979 values were interpolations of 1976 and 1982 values in the Development of Particulate, SO_2, and VOC Emissions Inventories and Source-Receptor Relationships for Delaware (Reference 1). However, due to the nation's commitment to curtail the use of imported oil, the 1979 levels of residential oil were kept constant for the 1987 inventory. It is assumed that the energy requirement represented by the curtailed oil imports can be met by the projected increases in use of natural gas and existing electric generating capacity. These projection methodologies were approved by local officials at AMS. Commercial/institutional and light industrial oil use was projected to increase slightly according to commercial/institutional and manufacturing employment, respectively. In New Castle County, values from the Development of Particulate, SO_2, and VOC Emissions Inventories and Source-Receptor Relationships for Delaware (Reference 1) were utilized.

Natural gas usage was projected according to figures obtained from the major natural gas suppliers (Public Service and Gas Company and Philadelphia Electric Company). Also, wood consumption as a fuel was projected according to population (residential subcategory only). New Castle County natural gas usage for 1979 was determined by linear interpolation of 1976 and 1982 values as was done for oil use. Natural gas projections from Development of Particulate, SO_2, and VOC Emissions Inventories and Source-Receptor Relationships for Delaware (Reference 1) were utilized for 1987.

Emission Factors

The emission factors used were those presently included in the Aerometric and Emissions Reporting System (AEROS). They are listed according to fuel type and pollutant type in Table 3.5. County-level VOC and NO_x emissions from fuel use are summarized in Table 3.6.

Allocation

Residential fuel use was allocated by dwelling units for all counties except Salem, for which population was utilized. For commercial/institutional fuel use, commercial employment was used as the allocation parameter. Industrial fuel use allocation was made by manufacturing employment.

2. GASOLINE MARKETING

Evaporative losses of volatile organic compounds occur from several gasoline marketing operations associated with service stations. These operations are identified as Stage I, Stage II, and Other marketing, storage, and transportation losses. Stage I losses result from underground storage tank loading at service stations. Stage II losses result from

TABLE 3.5

RESIDENTIAL, COMMERCIAL/INSTITUTIONAL, AND INDUSTRIAL FUEL USE EMISSION FACTORS

Fuel Category	Fuel Type	Units	Emission Factors				
			TSP	CO	SO_x	NO_x	VOC
Residential	Anthracite	(lb/10^2 ton)	1000	9000	3800S[a]	300	250
	Distillate Oil	(lb/10^4 gal)	25	50	1440S[a]	180	10
	Natural Gas	(lb/10^7 cf)	100	200	6	800	80
	Wood	(lb/10^2 ton)	2500	15000	50	100	600
Commercial	Anthracite	(lb/10 ton)	10A[a]	10	380S[a]	100	0
	Distillate Oil	(lb/10^4 gal)	20	50	1440S[a]	220	10
	Residual Oil	(lb/10^4 gal)	169	50	1590S[a]	600	10
	Natural Gas	(lb/10^7 cf)	100	200	6	1200	80
Industrial	Bituminous Coal	(lb/10 ton)	52A[a]	20	380S[a]	150	10
	Distillate Oil	(lb/10^4 gal)	20	50	1440S[a]	220	10
	Residual Oil	(lb/10^4 gal)	183	50	1590S[a]	600	10
	Natural Gas	(lb/10^7 cf)	100	170	6	1800	30

[a] Sulfur (S) and ash (A) contents shown on NEDS input forms in Appendix A.

Source: Aerometric and Emissions Reporting System (Reference 55).

TABLE 3.6

AREA SOURCE FUEL USE EMISSIONS (tpy)

	Residential				Commer./Inst.				Industrial			
	VOC		NO_x		VOC		NO_x		VOC		NO_x	
	1979	1987	1979	1987	1979	1987	1979	1987	1979	1987	1979	1987
Bucks	65	63	1,148	1,176	18	18	1,008	1,056	9	8	885	907
Chester	38	35	797	820	8	9	664	704	7	9	789	835
Delaware	95	90	1,373	1,407	36	42	1,379	1,548	15	17	1,140	1,205
Montgomery	118	105	1,631	1,666	49	56	2,108	2,287	38	39	2,425	2,547
Philadelphia	404	339	3,722	3,841	33	39	2,084	2,228	--	--	-----	-----
Burlington	47	39	744	766	16	19	921	1,007	--	--	26	26
Camden	110	104	1,343	1,383	52	58	1,951	2,182	3	4	299	299
Gloucester	29	27	499	523	6	6	374	437	--	--	16	16
Mercer	66	63	895	915	55	58	1,945	2,105	10	10	827	843
Salem	5	5	171	171	--	--	130	145	--	--	11	11
New Castle	53	54	742	761	24	24	697	725	1	1	240	211
AQCR Totals	1,030	924	13,065	13,429	297	329	13,261	14,424	83	88	6,658	6,900

vehicle refueling, and the other losses are the sum of emissions from tank trucks in transit, spillage, and underground tank breathing.

State tax agencies were the source most preferred in Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds (Reference 9) to provide the county activity parameter, gallons of gasoline marketed. The following agencies provided gasoline sales data:

o Pennsylvania -	Pennsylvania Department of Revenue Bureau of Accounts, Settlements License and Bonding Division
o New Jersey -	Department of the Treasury Division of Taxation Research and Statistics Section
o Delaware -	Department of Public Safety Division of Motor Fuel Tax

Conversations with officials in these agencies revealed that the collection and record keeping of the motor fuels tax are similar in Pennsylvania, New Jersey, and Delaware, and that county level gasoline sales information is not available from their offices. These agencies receive monthly reports and revenues from each bulk distributor's home or regional accounting office. The reports cover statewide sales without provision for a more detailed geographic breakdown. ES concluded that further efforts to obtain the county-level gasoline sales data would require an expensive distributor survey with no guarantee of improved results. In the absence of specific sales data by county, ES allocated the state total fuel sales obtained from the departments of revenue to each county by the ratio of county to state service station employment from County Business Patterns (References 10, 11, 12). State and county service station employment data are listed in Table 3.7. Since data on vehicle-miles travelled (VMT) and service station employment were available on a county basis, either could have been used for allocation. Service station employment, however, more accurately reflected the 400 to 800 gallon per capita gasoline usage "rule-of-thumb" in the VOC/NO_x Emission Inventory Requirements for 1982 Ozone SIPs - Workbook (Reference 13). The county-level sales data are listed in Table 3.8. County-level gasoline sales data were included on the NEDS forms for Stage I, Stage II, and Other. Emissions for each category were calculated using the county-specific emission factors in Table 3.14.

The Federal Highway Administration's Highway Statistics (Reference 14) reports state total fuel sales to the private/commercial and public (Federal, state, county, and municipal) sectors. The sum of gasoline sales for Pennsylvania, New Jersey, and Delaware as reported in the 1979 Highway Statistics (Reference 14) was greater than comparable data collected from the tax agencies by 0.4%. For this reason, ES believes that the figures used account for gasoline distribution at untaxed outlets.

Projection

Gasoline marketing was projected by vehicle miles travelled (VMT) data and average mile per gallon estimates. The VMT estimates for cars

TABLE 3.7

GASOLINE SERVICE STATION (SIC 554) EMPLOYMENT

State, County	Employment
Pennsylvania	35,409
Bucks	1,584
Chester	803
Delaware	1,699
Montgomery	2,645
Philadelphia	3,067
New Jersey	21,402
Burlington	1,152
Camden	1,482
Gloucester	511
Mercer	961
Salem	160
Delaware	1,731
New Castle	1,177

Source: County Business Patterns (References 10, 11, 12).

TABLE 3.8

GASOLINE MARKETED (10^3 gal)

County	1979	1987
Bucks	220,622	175,216
Chester	111,843	84,835
Delaware	236,639	189,217
Montgomery	368,400	294,821
Philadelphia	427,176	336,278
Burlington	185,064	137,170
Camden	238,077	185,722
Gloucester	82,090	68,881
Mercer	154,380	127,003
Salem	25,703	19,335
New Castle	200,286	160,077

and trucks are linear interpolations of DVRPC census tract estimates for the DVRPC counties and summaries of the linknode VMT estimates for New Castle and Salem Counties. The VMT estimates are divided into two categories, as noted in Table 3.9.

The average mile per gallon (MPG) figures shown in Tables 3.10 through 3.13 were calculated from information provided by a number of sources. Average MPG figures for the nationwide fleet mix are available for both automobiles and single unit trucks in Highway Statistics 1970, Highway Statistics 1974, and Highway Statistics 1978 (References 15, 16, 17). Corporate average fuel economy regulations were obtained from the U.S. Department of Transportation for automobiles and trucks; however, the truck MPG regulations were so complex that the available VMT data could not be utilized with the truck MPG regulations. The fraction of annual miles travelled by automobiles, light duty trucks, and heavy duty trucks was obtained from Compilation of Air Pollutant Emission Factors (Reference 18).

Average MPG data were calculated separately for automobiles and trucks for each year of interest utilizing the national fleet mix fuel ratings and the corporate fuel economy regulations. Average MPG for calendar years 1986 and 1987 were assumed to equal 1985 values because no regulations exist for 1986 and 1987. Truck MPG estimates were created to match the same percent changes as reflected by concurrent auto regulations. Dividing VMT by the average MPG figures gave approximate fuel consumption data. The ratio of these approximate fuel use data in the projection year to those in the base year was used as a projection factor. The projection factors were multiplied by the actual base year gasoline sales for each county to obtain 1987 county-level gasoline sales. Auto and truck fuel use was calculated separately before summing for use in making projections.

Emission Factors

The emission factors for this category are from Compilation of Air Pollutant Emission Factors (Reference 18); however, slight modifications were necessary for each year and each state. A survey of the air pollution agencies indicated that varying control techniques were being utilized for each year. The following contacts were made to determine the percent and type of controls in place:

- Tom Weir, Philadelphia AMS
- Francine Carlini (Norristown regional office), PennDER
- Terry Juchnowski, NJDEP
- Sam Eaton, DelDNREC

The emission factors are noted by area and year in Table 3.14. The products of the emission factors and gallons of fuel used are the emissions shown in Table 3.15.

Allocation

Gasoline marketing was allocated by three different methods. In the DVRPC counties, allocation was accomplished by the relative sum of the automobile, light gasoline truck, and heavy gasoline truck VMT per each census

TABLE 3.9

DAILY VEHICLE-MILES TRAVELLED

County	Year	Automobile (1,000 VMT)	Gasoline Truck (1,000 VMT)
Bucks	1979	5,932	925
	1987	7,254	1,129
Chester	1979	4,356	695
	1987	5,085	807
Delaware	1979	5,210	830
	1987	6,414	1,015
Montgomery	1979	8,712	1,357
	1987	10,738	1,668
Philadelphia	1979	10,576	1,716
	1987	12,841	2,046
Burlington	1979	5,639	884
	1987	6,437	1,005
Camden	1979	5,697	894
	1987	6,831	1,076
Gloucester	1979	2,986	473
	1987	3,849	612
Mercer	1979	3,731	577
	1987	4,728	730
Salem	1979	1,987	279
	1987	2,314	325
New Castle	1979	5,906	828
	1987	7,308	1,025

Source: Delaware Valley Regional Planning Commission.

TABLE 3.10

AUTOMOBILE AVERAGE MPG FOR 1979

Vehicle Mix Years	Average MPG For Mix Year	Fraction of Annual Travelled Miles[a]	Cumulative Average MPG
Pre and 1970	13.57[b]	0.103	1.396
1970 - 1974	13.41[c]	0.283	3.793
1975 - 1978	14.65[d]	0.502	7.352
1979	19.00[e]	0.112	2.128
Total			14.669

[a] Compilation of Air Pollutant Emission Factors (Reference 18), Table D.1-22.

[b] Highway Statistics 1970 (Reference 15).

[c] Calculated from Highway Statistics 1970 (Reference 15) and Highway Statistics 1974 (Reference 16).

[d] Calculated from Highway Statistics 1974 (Reference 16) and Highway Statistics 1978 (Reference 17).

[e] Communications with U.S. Department of Transportation concerning corporate average fuel economy regulations from Energy Policy and Conservation Act.

TABLE 3.11

AUTOMOBILE AVERAGE MPG FOR 1987

Vehicle Mix Years	Average MPG For Mix Year	Fraction of Annual Travelled Miles	Cumulative Average MPG
Pre and 1978	14.65	0.103	1.508
1979	19	0.047	0.893
1980	20	0.063	1.260
1981	22	0.079	1.738
1982	24	0.094	2.256
1983	26[a]	0.108	2.808
1984	27[a]	0.121	3.267
1985	27.5[a]	0.130	3.575
1986	27.5[b]	0.143	3.932
1987	27.5[b]	0.112	3.080
Total			24.317

[a] Communications with U.S. Department of Transportation concerning corporate average fuel economy regulations from Energy Policy and Conservation Act.

[b] Assumed to be the same as 1985 since existing regulations only cover the period through 1985.

TABLE 3.12

GASOLINE TRUCK AVERAGE MPG FOR 1979

Vehicle Mix Years	Average MPG For Mix Year	Fraction of Annual Travelled Miles[a]	Cumulative Average MPG
Pre and 1970	10.12[b]	0.400	4.048
1971-1974	9.68[c]	0.290	2.807
1975-1978	10.52[d]	0.237	2.493
1979	11.00[e]	0.074	0.814
Total			10.162

[a] Composite of light and heavy gasoline trucks from *Compilation of Air Pollutant Emission Factors* (Reference 18), assuming the eleven county average for heavy duty trucks at 37% of the total truck VMT, Tables D.2-12 and D.4-11.

[b] *Highway Statistics 1970* (Reference 15).

[c] Calculated from *Highway Statistics 1970* (Reference 15) and *Highway Statistics 1974* (Reference 16).

[d] Calculated from *Highway Statistics 1974* (Reference 16) and *Highway Statistics 1978* (Reference 17).

[e] Assumed because average miles per gallon regulations are too complex for data compatibility.

TABLE 3.13

GASOLINE TRUCK AVERAGE MPG FOR 1987

Vehicle Mix Years	Average MPG For Mix Year	Fraction of Annual Travelled Miles[a]	Cumulative Average MPG
Pre and 1978	10.52	0.400	4.208
1979	11.00	0.079	0.869
1980	11.50	0.073	0.839
1981	12.00	0.072	0.864
1982	12.50	0.066	0.825
1983	13.00[a]	0.062	0.806
1984	13.50[a]	0.061	0.823
1985	14.00[a]	0.058	0.812
1986	14.00[a]	0.056	0.784
1987	14.00[a]	0.074	1.036
Total			11.866

[a] Assumed because average miles per gallon regulations are too complex for data compatibility.

TABLE 3.14

EMISSION FACTORS FOR GASOLINE MARKETING[a]

State	Category	VOC (lb/10^4 gal)	
		1979	1987
Pennsylvania			
Philadelphia County			
Stage I	Filling underground tank	31[b]	3.0[c]
Stage II	Vehicle refueling	90	9.0[d]
Other	Tanker transit losses, Breathing losses underground tank, Spillage	18.05	18.05
		139.05	30.05
Bucks, Chester, Delaware, Montgomery Counties			
Stage I	Filling underground tank	73[e]	3.0[c]
Stage II	Vehicle refueling	90	9.0[d]
Other	Tanker transit losses, Breathing losses underground tank, Spillage	18.05	18.05
		181.05	30.05
New Jersey			
Burlington, Camden, Gloucester, Mercer, Salem Counties			
Stage I	Filling underground tank	13.5[f]	3.0[c]
Stage II	Vehicle refueling	90	9.0[d]
Other	Tanker transit losses, Breathing losses underground tank, Spillage	18.05	18.05
		121.55	30.05
Delaware			
New Castle County			
Stage I	Filling underground tank	106.0[g]	3.0[c]
Stage II	Vehicle refueling	90.0	9.0[d]
Other	Tanker transit losses, Breathing losses underground tank, Spillage	18.05	18.05
		214.05	30.05

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[a] Based on current and proposed regulations.

[b] 40% Submerged, 60% Balanced.

[c] 100% Balanced.

[d] Controlled.

[e] 100% Submerged.

[f] 15% Submerged, 85% Balanced.

[g] 22% Submerged, 78% Splash.

Source: Compilation of Air Pollutant Emission Factors (Reference 18), Tables 4.4-3 and 4.4-4.

TABLE 3.15

GASOLINE MARKETING VOC EMISSIONS (tpy)

County	1979	1987
Bucks	1,997	263
Chester	1,012	127
Delaware	2,142	284
Montgomery	3,335	443
Philadelphia	2,970	505
Burlington	1,125	206
Camden	1,447	279
Gloucester	499	103
Mercer	938	191
Salem	156	29
New Castle	2,144	241
AQCR Totals	1[illegible],765	2,671

tract by year. In New Castle County, the estimated total VMT per grid was used for allocation. Commercial employment was utilized as the allocation mechanism in Salem County because no subcounty division of VMT was available.

3. SOLVENT USE

Organic liquids are used as solvents in cleaning and product application. VOC emissions occur when part or all of the solvent evaporates to the atmosphere. This section considers VOC emissions from four major solvent use categories: graphic arts; commercial/consumer solvent use; degreasing; and surface coating. Per-capita activity factors were available in Procedures for most of these categories and are listed in Table 3.16. These factors are the only means suggested by Procedures to evaluate the emissions of certain categories. Where alternatives exist, they are discussed.

Emissions from the four major solvent use categories are listed by county in Table 3.17.

Graphic Arts

The graphic arts category concerns establishments using letterpress, flexography, lithography, (roto) gravure, and screen process printing that emit less than 100 tons of VOC per year. Procedures predicts emissions from these establishments to be 0.8 lb/capita-year. The emissions of graphic arts facilities listed in the point source inventory that emit less than 100 tons of VOC per year (59 tons in Chester County, 307 tons in Philadelphia County, 38 tons in Mercer County, 68 tons in Salem County, and 5 tons in New Castle County) were subtracted from the emissions estimated by this factor to avoid double counting.

Commercial/Consumer Solvent Use

Emissions from commercial/consumer solvent use result from the use of several commercially available products such as aerosol products, nonindustrial adhesives, and polishes and waxes. Procedures predicts emissions from this category to be 6.3 lbs/capita-year excluding nonreactives. The factor 10 lbs/capita-year before the exclusion of nonreactives from the VOC/NO_x Emission Inventory Requirements for 1982 Ozone SIPs - Workbook (Reference 13) was used to calculate emissions from commercial/consumer solvent use.

Degreasing

Evaluation of degreasing emissions required the development and use of a per-employee factor in addition to the use of a per-capita factor from Procedures. Degreasing is nonaqueous solvent metal cleaning of which there are three types. Cold cleaning degreasing is small-scale, maintenance-oriented metal cleaning. Seventy percent of the cold cleaning units are present in repair facilities and thirty percent are devoted to manufacturing operations. Open top vapor and conveyorized degreasers are larger units commonly involved in manufacturing operations. The factor 4 lbs/

TABLE 3.16

SOLVENT USE CATEGORY PER-CAPITA FACTORS

Category	Lbs/Capita
Graphic Arts	0.8
Commercial/Consumer Solvent Use	10
Cold Cleaning Degreasing	4
Surface Coating	
Architectural	4.6
Auto Refinishing	1.9[a]

[a] 2.6 tons/employee in SICs 7531 and 7535.

Source: Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds, Volume I, Second Edition (Reference 9).

TABLE 3.17

SOLVENT USE EMISSIONS
(tons)

County	Graphic Arts		Commercial/ Consumer Solvent Use		Degreasing		Surface Coating	
	1979	1987	1979	1987	1979	1987	1979	1987
Bucks	189	203	2,364	2,512	2,023	2,085	5,432	5,572
Chester	10	11	1,509	1,559	1,269	1,299	3,865	3,938
Delaware	245	254	3,062	3,181	2,083	2,152	3,329	3,441
Montgomery	270	284	3,375	3,582	3,323	3,440	11,047	11,353
Philadelphia	468	469	9,695	9,739	5,199	5,235	17,566	17,734
Burlington	145	154	1,813	1,939	1,165	1,240	4,679	4,945
Camden	202	215	2,519	2,673	1,562	1,627	3,970	4,105
Gloucester	82	89	1,030	1,128	630	678	941	1,013
Mercer	95	100	1,668	1,757	1,240	1,296	4,804	5,007
Salem	0	---	338	375	137	151	235	253
New Castle	156	164	2,017	2,161	1,261	1,342	4,126	4,374

capita-year suggested in Procedures was used to estimate cold cleaning degreasing emissions. For open top vapor and conveyorized degreasing, Procedures recommends inventorying by point source methods to the extent possible and then scaling-up the emissions by employment in SIC categories 25 and 33-39. Information in the point source file was insufficient for scale-up because employment data were missing and degreasing emissions were only listed for two counties. Instead of scaling-up, the emissions from open top vapor and conveyorized degreasing were evaluated using information in Control of Volatile Organic Emissions from Solvent Metal Cleaning (Reference 19). This reference lists the three types of degreasing operations and their percent contribution to national degreasing emissions. To calculate open top vapor and conveyorized degreasing emissions, national cold cleaning emissions were first calculated as the product of national population and the 4 lbs/capita factor. Next, total national degreasing emissions were calculated by dividing national cold cleaning emissions by 0.55, their fraction of the total national degreasing emissions. Subtracting national cold cleaning emissions from total national degreasing emissions yields national open top vapor and conveyorized degreasing emissions. These emissions were divided by national employment in SICs 25 and 33-39 and a factor of .036 tons/employee was obtained. National employment by SIC was available in the General Summary 1977 Census of Manufacturers (Reference 20). County-level area source emissions from open top vapor and conveyorized degreasing were calculated as the product of this per-employee factor and county employment in SICs 25 and 33-39 minus emissions listed in the point source file (4 tons in Montgomery County and 533 tons in Philadelphia County). County employment by SIC is available in County Business Patterns (References 10, 11, 12). Table 3.18 lists county and national employment for SICs 25 and 33-39.

County area-source degreasing emissions are summarized in Table 3.19.

Surface Coating

Surface coating operations emit VOC when the solvent carrier evaporates. These surface coating operations are broadly classified as non-industrial or industrial. Non-industrial surface coating is further classified as architectural surface coating and automobile refinishing.

Architectural surface coatings are paints applied to the interior and exterior of homes and buildings that dry at ambient conditions. In lieu of a survey of local wholesale and retail suppliers of solventborne paints, varnishes, and other coatings, Procedures recommends using the factor 4.6 lbs VOC/capita-year to estimate emissions from architectural surface coating. This factor was used to evaluate emissions from this category and includes emissions from the evaporation of the solvent carrier in the paint and any solvents used in thinning and cleanup.

Automobile refinishing is the repainting of worn or damaged vehicles performed at body shops and car dealerships. Surveys of these facilities are not recommended by Procedures. Instead, Procedures estimates emissions from automobile refinishing by factors of 2.6 tons/employee-year in SICs 7531 and 7535 or 1.9 lb/capita-year. Employment data from County

TABLE 3.18

DEGREASING EMPLOYMENT

County	2-Digit SIC Employment								
	25	33	34	35	36	37	38	39	Total
Bucks	762	7,500	4,309	5,172	4,417	947	5,769	880	29,756
Chester	324	6,114	2,534	4,148	2,345	1,750	1,002	173	18,390
Delaware	412	611	1,774	7,582	1,240	7,500	922	3,666	23,707
Montgomery	1,750	5,598	8,325	11,632	9,698	5,754	10,370	1,515	54,642
Philadelphia	3,375	2,259	13,865	9,416	11,774	5,141	1,750	3,660	51,240
Burlington	356	1,510	2,066	2,763	4,002	390	544	538	12,169
Camden	538	967	3,465	2,610	5,099	523	1,004	1,098	15,304
Gloucester	109	375	1,377	807	2,587	175	175	411	6,016
Mercer	261	750	3,750	5,549	4,205	-----	772	554	15,841
Salem	-----	-----	58	-----	-----	-----	-----	-----	58
New Castle	-----	2,326	1,586	1,208	375	7,500	1,750	125	12,544
National (1,000)	463.8	1,113.6	1,555.7	2,083.3	1,723.1	1,768.2	559.1	440.7	9,707.5

Source: County Business Patterns (References 10, 11, 12), and General Summary 1977 Census of Manufacturers (Reference 20).

TABLE 3.19

DEGREASING EMISSIONS
(tons)

County	Cold Cleaning		Open Top Vapor and Conveyorized	
	1979	1987	1979	1987
Bucks	946	1,007	1,077	1,078
Chester	603	625	666	674
Delaware	1,225	1,277	858	875
Montgomery	1,350	1,431	1,973	2,009
Philadelphia	3,878	3,895	1,321	1,340
Burlington	725	776	440	464
Camden	1,008	1,070	554	557
Gloucester	412	453	218	225
Mercer	667	701	573	595
Salem	135	151	2	0
New Castle	807	865	454	477

Business Patterns (References 10, 11, 12), listed in Table 3.20, and the per-employee factor, were used to generate this category's activity parameter for all counties except Salem. Employment for these four-digit categories was not available in Salem County so that the per-capita factor was used. Emissions from automobile refinishing listed in the point source file (76 tons in Philadelphia County) were subtracted from this category's area source activity to avoid double counting.

Table 3.21 lists the categories that were suggested in Procedures and considered under small industrial surface coating. These categories are equivalent to those of the point source summary Table 1.1. The SICs corresponding to each type of operation are from the Second Interim Report - Air Pollution Control Engineering and Cost Study of the General Surface Coating Industry (Reference 21). Annual nationwide emissions are from the Control Technique Guideline (CTG) summaries (References 22, 23) and national employment is from the General Summary 1977 Census of Manufacturers (Reference 20). Per-employee factors for each category were obtained by dividing national emissions by national employment. The per-employee factor for plastic parts painting, SIC 307, is the per-employee factor for SIC Major Group 30 from Procedures, Table 3.1-1 (Reference 9). National emissions for developing a factor specific to SIC 307 were not available in the CTG summaries because plastic parts painting is not a CTG category. Per-employee factors to evaluate area source surface coating emissions from large ship, large airplane, and automobile manufacture were not developed. These types of manufacturing are generally major sources so it was assumed that all of their emissions are in the point source file. Also, area source emissions from the "other" category were not calculated because national emissions and corresponding SICs were undefined.

County employment from County Business Patterns (References 10, 11, 12) multiplied by the appropriate per-employee factor equals county emissions for each category. County employment for the nine categories of interest is listed in Table 3.22.

Category emissions developed by the per-employee factors minus point source emissions for the same category yields category area source emissions. When area source emissions developed by the per-employee factors were less than the corresponding point source emissions, category area source emissions were set equal to zero. Small industrial surface coating emissions are the sum of emissions from the nine categories of Table 3.22.

Emissions from the three categories of surface coating are listed by county in Table 3.23.

Projection

Open top vapor and conveyorized degreasing emissions and industrial surface coating emissions were projected by manufacturing employment as listed in Table 3.4. All other solvent-use categories were projected by population.

TABLE 3.20

AUTO REFINISHING EMPLOYMENT

County	4-Digit SIC Employment	
	7531	7535
Bucks	321	
Chester	179	
Delaware	342	
Montgomery	337	103
Philadelphia	676	52
Burlington	170	
Camden	300	
Gloucester	85	
Mercer	169	
Salem		
New Castle	203	80

Source: County Business Patterns (References 10, 11, 12).

TABLE 3.21

OTHER SMALL INDUSTRIAL SURFACE COATING

Category	SIC	Annual Emissions (tons)	National Employment (1,000)	Per Employee Factor (tons/ employee-yr)
Large Appliances	3631, 3632	46,000	61.2	0.75
Magnet Wire	3357	32,500	66.3	0.49
Automobile[a]				
Cans	3411	150,000	59.8	2.50
Metal Coils	3479	33,000	32.3	1.02
Paper	2641	350,000	39.7	8.82
Fabric	2295, 3069	110,000	101.9	1.08
Metal Furniture	2514, 2522, 2531, 2542,	100,000	110.2	0.91
Wood Furniture	2434, 2511, 2512, 2517, 2521, 2531	253,532	323.0	0.78
Miscellaneous Metal Products	3442, 3523, 356, 357, 358, 3634, 3635	1,000,000	1019.1	0.98
Plastic Parts[b] Painting	307			0.256
Large Ships[a]				
Large Aircraft[a]				
Others[c]				

[a] Assumed all point source.
[b] Factor for SIC major group 30 from Procedures Table 3.1 (Reference 9).
[c] Emissions and SICs undefined.

Source: 1) Summary of Group I, II, Control Technique Guideline Documents for Control of Volatile Organic Emissions from Existing Stationary Sources (References 22, 23).
2) Second Interim Report - Air Pollution Control Engineering and Cost Study of the Surface Coating Industry (Reference 21).
3) General Summary 1977 Census of Manufacturers (Reference 20).
4) Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds, Volume I, Second Edition (Reference 9).

SMALL INDUSTRIAL SURFACE COATING EMPLOYMENT

County	Category Employment								
	Magnet Wire	Cans	Metal Coils	Paper	Fabric	Metal Furniture	Wood Furniture	Misc. Metal Products	Plastic Parts Painting
Bucks	375	175	256	1,074		314	374	2,452	2,197
Chester					60	175	60	2,482	1,750
Delaware			62			375		184	1,750
Montgomery	175	60	141			1,500	423	6,540	1,973
Philadelphia	175	1,750	382	396	250	1,849	463	4,003	833
Burlington	175		60	175		175		1,567	60
Camden		375				175		913	375
Gloucester		60						418	375
Mercer	375					175		3,161	723
Salem									60
New Castle	375		60	175				273	1,750

Source: County Business Patterns (References 10, 11, 12).

TABLE 3.23

SURFACE COATING EMISSIONS
(tons)

County	Architectural 1979	Architectural 1987	Auto Refinishing 1979	Auto Refinishing 1987	Other Small Industrial 1979	Other Small Industrial 1987
Bucks	1,087	1,160	835	886	3,510	3,526
Chester	694	716	465	476	2,706	2,746
Delaware	1,408	1,464	889	924	1,032	1,053
Montgomery	1,553	1,643	1,144	1,215	8,350	8,495
Philadelphia	4,459	4,478	1,817	1,824	11,290	11,432
Burlington	834	893	442	468	3,403	3,584
Camden	1,159	1,229	780	827	2,031	2,049
Gloucester	474	516	221	242	246	255
Mercer	767	812	439	460	3,598	3,735
Salem	156	169	64	72	15	12
New Castle	928	993	736	789	2,462	2,592

Emission Factors

Volatile organic compounds are the only pollutants emitted from solvent use. The emission factor, 2,000 lbs/ton, was used since the activity parameters for the solvent categories were emissions.

Allocation

Open top vapor and conveyorized degreasing emissions and industrial surface coating emissions were allocated by manufacturing employment. All other solvent use categories were allocated by population.

4. OTHER SMALL INDUSTRIAL PROCESSES

Small industrial process emissions were developed to account for sources not specifically addressed elsewhere. Categories and associated SICs were selected by AMTB and SRAB from End Uses of Solvents Containing Volatile Organic Compounds (Reference 24). Emissions-per-employee factors were developed for the seven source categories using national emissions from SRAB and employment from the General Summary 1977 Census of Manufacturers (Reference 20). Emissions in the point source file were summarized by SIC and subtracted from the appropriate categories to avoid double counting.

Table 3.24 lists the categories considered as small industrial processes, associated SICs, and emissions-per-employee factors used. County emissions are summarized in Table 3.25.

Projection

Small industrial process emissions were projected by manufacturing employment.

Emission Factors

Calculated activity equals emissions; therefore, the emission factor is 2,000 lbs VOC/ton.

Allocation

Emissions were allocated by manufacturing employment.

5. DRY CLEANING

Solvent evaporation produces VOC emissions at drycleaning facilities. Per capita factors from Procedures for commercial drycleaning and self-service drycleaning are 1.2 lbs/capita and 0.3 lbs/capita, respectively. Procedures does not provide a factor for estimating industrial drycleaning emissions. The factor 2.4 lbs/capita[a] estimates emissions from the entire

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[a] Letter from William H. Lamason of 5/29/81 recommended use of this factor rather than those in Procedures.

TABLE 3.24

SMALL INDUSTRIAL PROCESSES[a]

Category	SICs	Tons/Employee
Vegetable Oil Extraction	2074, -5, -6, -7, -9	4.15
Alcoholic Beverages	2082, -4, -5	0.075[b]
Textiles Finishing	2261, -2, -9	2.77
Plastics and Resins	2821, -4	1.97
Rubber Manufacturing	3011, -21, -31, -41, -69	0.85
Paint Manufacturing	2851, 3952	0.38
Bread Baking	2051	0.57[c]

[a] End Uses of Solvents Containing VOC, Part III Application to Emission Inventories (Reference 24).

[b] Table 3.1-1, Procedures (Reference 9).

[c] Nonmethane Organic Emissions from Bread Producing Operations (Reference 62).

TABLE 3.25

SMALL INDUSTRIAL PROCESS EMISSIONS (tpy)

County	1979	1987
Bucks	4,394	4,408
Chester	438	444
Delaware	459	467
Montgomery	2,518	2,561
Philadelphia	3,880	3,929
Burlington	1,863	1,965
Camden	934	944
Gloucester	272	281
Mercer	2,086	2,164
Salem	74	71
New Castle	2,740	2,884

drycleaning industry including industrial plants. Therefore, industrial drycleaning emissions are 0.9 lb/capita.

According to Section XII of the New Jersey SIP inventory, "Current New Jersey regulations (New Jersey Administrative Code 7:27-16, 17) will provide a 30% and a 50% reduction in 1978 VOC emissions for the years 1980 and 1987, respectively. Emissions from self-service plants are expected to change in proportion to population growth rates." Gary Pierce of NJDEP indicated that the regulations did not distinguish between industrial and commercial drycleaners. Procedures factors had been used to develop 1978 emissions in the aforementioned inventory. Therefore, the 2.4 lbs/capita figure was adjusted to develop 1979 emissions. The total drycleaning emission factor, 2.4 lbs/capita, minus emissions from self-service plants, 0.3 lb/capita, equals combined commercial and industrial drycleaning emissions, 2.1 lbs/capita. This combined factor was reduced by 15% and added to the self-service factor to obtain the 1979 New Jersey-specific factor, 2.08 lbs/capita.

No such regulations existed in Pennsylvania and Delaware where the 2.4 lbs/capita factor was used.

All point source drycleaning emissions (126 tons in Philadelphia County, 11 tons in New Castle County) were subtracted from the per capita developed emissions to avoid double counting.

County-level drycleaning emissions are listed in Table 3.26.

Projections

In accordance with the previous discussion of New Jersey regulations for drycleaning emissions, the commercial and industrial factor reduced by 50% plus the self-service factor equals the 1987 New Jersey-specific factor, 1.35 lbs/capita.

Pennsylvania and Delaware drycleaning emissions were projected by population as recommended in the respective SIPs.

Emission Factor

Calculated activity equals emissions so that the emission factor equals 100 lbs VOC/100 lbs solvent use.

Allocation

No data were available on the specific locations of dry cleaning establishments. Allocation to subcounty grids was by commercial employment.

6. PESTICIDES

Pesticide emissions consist of the volatile organic compounds that evaporate from insecticides, herbicides, fungicides, fumigants, and acaricides applied to cropland, gardens, lawns, etc.

TABLE 3.26

DRY CLEANING EMISSIONS (tpy)

County	1979	1987
Bucks	567	603
Chester	362	373
Delaware	735	764
Montgomery	810	858
Philadelphia	2,201	2,210
Burlington	378	262
Camden	525	361
Gloucester	215	152
Mercer	348	237
Salem	70	50
New Castle	473	519

The New Jersey Epidemiologic Studies Program - Report on Pesticide Usage Study (Reference 25) and A Methodology for Reactive Organic Gas Emissions Assessment of Pesticide Usage in California (Reference 26) formed the information base for evaluating pesticide emissions. The New Jersey Department of Health (DOH) report provides the total pounds of biologically active ingredients used for agriculture in each county by crop. The California Air Resources Board (CARB) report provides factors to adjust reported pesticide usage to account for unreported pesticide usage (e.g., weed oil, home, and industrial use) and biologically inert ingredients that evaporate and may participate in oxidant formation. Use of the CARB report was necessary because local agricultural officials were unable to supply information regarding the amount of inactive ingredients in pesticides.

To evaluate category emissions, the pesticide use per crop-acre figures in Table 3.27 were developed using the New Jersey DOH report and the 1974 Census of Agriculture New Jersey, Preliminary Report (Reference 27). The sum of these figures multiplied by the appropriate crop acreage in each county equals reported pesticide usage for the county. The New Jersey per crop-acre factors were also used in Pennsylvania and Delaware because state officials were unable to supply information on pesticide usage. As recommended in the CARB report, the inorganic fraction (30% of reported usage) was subtracted from reported county usage. The remainder, reported organic pesticides, multiplied by 6.9, the factor to account for unreported chemicals, yields total organic pesticide usage by county.

Pesticide emissions are summarized by county in Table 3.28.

No pesticide usage is reported for Philadelphia County because a 1978 preliminary Census of Agriculture was not published. These reports are not issued for counties with less than ten farms. Likewise, all agriculture-related emissions including equipment fuel use and agricultural burning were assumed negligible in Philadelphia County.

Projections

New Jersey activity levels were projected from the 1976 data assuming a 1% annual increase, as recommended by the New Jersey DOH. In Pennsylvania and Delaware, projection year pesticide use was calculated with compound growth factors developed from the change in acres of harvested cropland in each county as reported in the 1978 and 1969 censuses of agriculture.

Emission Factor

From the CARB report, the volatility of total organic pesticides is 90%. Therefore, the emission factor is 90 lbs VOC/100 lbs pesticide usage.

Allocation

Pesticides were allocated by harvested cropland acreage. This allocation parameter was established based on U.S.G.S. maps and conversations with county agricultural extension agents.

TABLE 3.27

PESTICIDE PER CROP-ACRE FACTORS

Crop	Lbs Active Pesticide/Crop-Acre
Corn	3.6
Grains Barley Oats Wheat Rye	0.01
Hay Alfalfa Hay	5.4
Potatoes	11.9
Soybeans	2.2
Apples	0.034
Peaches	0.034

TABLE 3.28

PESTICIDE EMISSIONS (tpy)

County	1979	1987
Bucks	691	725
Chester	1,139	1,335
Delaware	57	49
Montgomery	378	419
Philadelphia	-----	-----
Burlington	1,262	1,367
Camden	535	579
Gloucester	1,961	2,124
Mercer	374	405
Salem	644	698
New Castle	524	595

7. CUTBACK ASPHALT PAVING

Cutback asphalt paving produces organic solvent emissions due to evaporation during the curing process. The activity parameter for this category is tons of asphalt used. Energy Data Reports, Sales of Asphalt in 1977 (Reference 28) was used to obtain state total cutback usage in tons for each state in the study area. This total was then allocated to each individual county on the basis of the total miles of roadway. This information was obtained from the Departments of Transportation in New Jersey, Pennsylvania, and Delaware.

Projections

Projections for this category varied for each state. For New Jersey counties, activity parameters were projected based on the New Jersey cutback asphalt regulation and communications with industry officials. The asphalt manufacturers suggest the regulation will reduce consumption by 10% per annum until a substitute is found. In Pennsylvania, the amount of asphalt used from 1974 through 1977 was charted and projected to obtain the 1979 base year figure. Data obtained from the PennDOT and subsequently used in the Pennsylvania SIP indicate that asphalt usage will stay constant through 1987. Delaware cutback asphalt usage was projected by using estimates from the Delaware Department of Transportation. These were based on expected VMT growth.

Emission Factors

The emission factors for this category reflect the percentage of asphalt diluent that actually evaporates.

The New Jersey Department of Transportation estimates that equal amounts of rapid and medium cure asphalt are used in Preliminary Emission Inventory for the 1982 SIP (Reference 29). VOC emission factors in AP-42 Table 4.5-1 are given as weight percents of cutback used. The emission factors for rapid and medium cure asphalt are 32 and 20 weight percent. Therefore, VOC emissions in New Jersey are 26 weight percent or 520 lbs VOC/2000 lbs asphalt used.

The emission factor for medium cure asphalt, 400 lb VOC/2000 lbs asphalt used (20 wt%), was applied to Pennsylvania and Delaware cutback usage.

Cutback asphalt VOC emissions are listed by county in Table 3.29.

Allocation

Allocation to subcounty grids was made according to vehicle miles traveled. In Salem County, where this information was unavailable on a subcounty level, the surrogate parameter of population was used.

8. NATURAL GAS LEAKS

Three natural gas supply companies responded to requests for information. These were Delmarva Power, Public Service Electric and Gas of

TABLE 3.29

CUTBACK ASPHALT EMISSIONS (tpy)

County	1979	1987
Bucks	111	111
Chester	91	91
Delaware	69	69
Montgomery	114	114
Philadelphia	137	137
Burlington	658	283
Camden	555	239
Gloucester	411	177
Mercer	380	164
Salem	267	115
New Castle	40	51

New Jersey, and the Philadelphia Electric Company. Most companies record "unaccounted for" gas, which includes loss by theft, metering, accounting, and leakage. This is approximately one to three percent of total gas sales. Philadelphia Electric Company provided the only leakage estimate, which was 0.65 percent. It was assumed that this figure represents a reasonable estimate of leaks in the entire eleven-county Philadelphia AQCR. In addition, Philadelphia Electric Company provided a chromatographic analysis of its gas which showed the volatile organic components to be 99.12% of the total gas volume (see Table 3.30). This includes methane. Therefore, using the density of natural gas at ambient temperature and pressure of 0.042 lbs/cf, the leakage of reactive components can be determined as follows:

$$0.042 \text{ lbs/cf} \times 0.0065 \times 0.9912 = 2.7 \times 10^{-4} \text{ lbs/cf}$$

Emissions from natural gas leaks are listed by county in Table 3.31.

Projections

Projection year leakage was determined in proportion to the volume of gas sold in the projection years. The total sales of natural gas for the projection years is detailed in the fuel use categories earlier in the chapter. It was assumed that no further reduction in leakage would occur through 1987.

Emission Factors

Due to the method of calculation, activity parameters are emissions so that the emission factor is 1,000 lbs of VOC per 1,000 lbs of gas leakage.

Allocation

Natural gas leaks were allocated by the location of residential dwellings for all counties except Salem. In Salem County, natural gas leaks were allocated by population because dwelling unit data were not available.

9. AGRICULTURAL EQUIPMENT

This source category includes farm vehicles which consume either gasoline or diesel fuel. Since data sources varied, activity levels for this category within each state were computed independently.

To calculate farm tractor emissions in New Jersey, an annual average fuel use per tractor was determined. This was computed by taking the gallons of gasoline used on farms from the Highway Statistics 1974 (Reference 16) and the number of tractors from the 1974 Census of Agriculture New Jersey, Preliminary Report (Reference 27). From data in New Jersey Area Source VOC and NO_x Emissions Inventory for Selected Counties and Categories (Reference 30) it was assumed that 60% of the tractors in the state are gasoline, thus arriving at the number of gasoline tractors in the state and an annual average gasoline use of 427 gallons per tractor. The annual quantity of gasoline and diesel used per county was computed using

TABLE 3.30

AVERAGE GAS ANALYSIS BY CHROMATOGRAPH

Component	Percent by Weight
Methane	97.00
Ethane	1.73
Carbon Dioxide	0.56
Nitrogen	0.32
Propane	0.26
High-Order Paraffins	0.13

Source: Philadelphia Electric Company.

TABLE 3.31

VOC EMISSIONS FROM NATURAL GAS LEAKS (tpy)

County	1979	1987
Bucks	1,460	1,654
Chester	1,156	1,304
Delaware	2,164	2,452
Montgomery	3,132	3,553
Philadelphia	6,206	7,047
Burlington	1,215	1,358
Camden	2,451	2,722
Gloucester	470	564
Mercer	1,880	2,016
Salem	148	175
New Castle	1,721	1,754

the number of tractors by county and the knowledge that 60% of the tractors are gasoline and 40% diesel with each one consuming an average of 427 gallons per year.

For the Pennsylvania Counties and New Castle County, Delaware, the type and number of farm vehicles were obtained from the 1974 Census of Agriculture Pennsylvania (Reference 31) and the 1974 Census of Agriculture Delaware (Reference 32), respectively. Combining this number with average annual consumption figures from the Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds (Reference 9), an estimate of the total number of gallons used for both gasoline and diesel vehicles was calculated. Table 3.32 shows the type of fuel used by the equipment inventoried.

Category emissions were assumed to be negligible in Philadelphia County as discussed in the section addressing pesticide emissions.

Projections

Fuel use data were linearly extrapolated to the base year using historical changes in cropland taken from 1974 Census of Agriculture documents (References 27, 31, 32) for each individual state. Projection year fuel use was calculated with compound growth factors developed from the change in acres of harvested cropland in each county as reported in the 1978 and 1969 censuses of agriculture.

Emission Factors

Farm equipment emission factors are shown in Table 3.33 for both gasoline and diesel-fueled equipment. Emission factors for non-tractor categories were developed from Compilation of Air Pollutant Emission Factors (Reference 18) by weighting the emission factor for each equipment type against the relative percent use for all types of equipment as shown in Table 3.32. For purposes of input to the emission factor file, a weighted emission factor was then calculated in the same manner for the tractor and non-tractor classifications separately for diesel and gasoline categories.

The total VOC emissions for gasoline vehicles is the sum of aldehydes, exhaust, crankcase, and evaporative sources. The VOC emissions for diesel vehicles are reflective of exhaust emissions only.

County-level VOC and NO_x emissions from agricultural equipment are listed in Table 3.34.

Allocation

Allocation was made to the existing cropland per grid. These data came from U.S.G.S. quadrangle maps and communications with local officials who provided supplemental maps.

TABLE 3.32

FARM MACHINERY USAGE DATA

Type of Machinery	Annual Use (hrs/yr)	Diesel Fuel (%)	Gasoline (%)	Population[b] (10^5 units)
Tractors	*	30[a]	65	45
Combines	71	43	57	**
Balers	24	---	100	6.55
Harvesters	120	100	---	2.95
General Purpose	50	50	50	12.05

* 490 hr/yr diesel, 291 hr/yr gasoline.

** $5.06(10)^5$ gasoline, $2.17(10)^5$ diesel.

[a] About 5% is liquid petroleum gas.

[b] Compilation of Air Pollutant Emission Factors (Reference 18), Table 3.2.6-1.

Source: Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds (Reference 9).

TABLE 3.33

AGRICULTURAL EQUIPMENT EMISSION FACTORS

Pollutant	Combined Gasoline Equipment Use (lbs/10^3 gal)	Combined Diesel Equipment Use (lbs/10^4 gal)
Particulates	7.74	473
CO	3,454	1,248
SO_x	5.30	312
NO_x	139	3,269
VOC	201	712

Source: Compilation of Air Pollutant Emission Factors (Reference 18), Table 3.2.6-2.

TABLE 3.34

AGRICULTURAL EQUIPMENT EMISSIONS (tpy)

County	1979		1987	
	VOC	NO_x	VOC	NO_x
Bucks	117	221	122	230
Chester	220	408	252	505
Delaware	12	19	9	17
Montgomery	90	173	96	193
Philadelphia	---	---	---	---
Burlington	65	108	84	117
Camden	3	---	3	---
Gloucester	55	95	56	96
Mercer	28	56	28	56
Salem	66	100	90	131
New Castle	75	136	87	160

10. CONSTRUCTION EQUIPMENT

This source category includes off-highway construction equipment which consumes either gasoline or diesel fuel. Again, because of different data sources, activity levels within each state were computed independently. Using national averages from Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds (Reference 9), it was determined that the ratio of diesel to gasoline construction fuel use is 93/7.

To calculate diesel construction equipment fuel use in New Jersey, the state diesel farm tractor fuel usage was subtracted from the off-highway diesel fuel use found in the Mineral Industry Surveys, Sales of Fuel Oil and Kerosine in 1975 (Reference 33). The resulting number of gallons was attributed to diesel construction equipment for the entire state. The statewide fuel usage was then proportioned to the counties based on construction employment.

For Pennsylvania, construction diesel fuel use was obtained from the 1979 Pennsylvania SIP. In this document, the activity parameter (gallons of diesel fuel used) was obtained from the Energy Data Reports, Sales of Fuel Oil and Kerosine in 1976 (Reference 34). The state total was then apportioned to counties by the number of construction employees listed in the County Business Patterns 1976 Pennsylvania (Reference 35).

For New Castle County, Delaware, the Energy Data Reports, Sales of Fuel Oil and Kerosine in 1976 (Reference 34) provided data on diesel fuel consumed by all off-highway (construction and agricultural) equipment. Agricultural diesel fuel consumption was then subtracted from this figure to obtain construction diesel fuel use. Diesel fuel consumption was apportioned to New Castle County by its percentage of construction employees as obtained from Revised Preliminary Employment Projections for Delaware and the Three Counties, by Major Industrial Sector, Through 1995 (Reference 5). Construction gasoline fuel use was calculated using county-level diesel fuel use and the ratio of national diesel to gasoline construction fuel consumption.

Projections

Changes in construction employment for each county were used to project data to the base year and 1987. Construction employment projections for each county are noted in the introduction to this chapter.

Emission Factors

Construction equipment emission factors were calculated from Compilation of Air Pollutant Emission Factors (Reference 18) by weighting the emission factor for each type of equipment in accordance with its relative percent use. Gasoline equipment and diesel equipment emission factors were calculated separately. The results are shown in Table 3.35. Construction equipment VOC and NO_x emissions are listed by county in Table 3.36.

TABLE 3.35

CONSTRUCTION EQUIPMENT EMISSION FACTORS

Pollutant	Gasoline Equipment ($lbs/10^3$ gallons)	Diesel Equipment ($lbs/10^4$ gallons)
Carbon Monoxide	3,728	911.3
VOC	185.0	362.2
Nitrogen Oxides	112.5	4,192
Sulfur Oxides	5.28	311.6
Particulates	7.05	243.5

Source: Compilation of Air Pollutant Emission Factors (Reference 18), Tables 3.2.7-1 and 3.2.7-2.

TABLE 3.36

CONSTRUCTION EQUIPMENT EMISSIONS (tpy)

County	1979		1987	
	VOC	NO_x	VOC	NO_x
Bucks	19	264	19	284
Chester	14	176	15	172
Delaware	52	484	54	483
Montgomery	106	948	108	986
Philadelphia	215	1,836	225	1,950
Burlington	12	148	14	162
Camden	61	547	65	582
Gloucester	2	30	2	32
Mercer	4	60	4	62
Salem	2	18	3	34
New Castle	47	411	60	548

Allocation

Allocation to subcounty grids was made in proportion to construction employment for 1979 and 1987 as determined from data supplied by DVRPC and the State of New Jersey. For New Castle County, allocation was by population.

11. INDUSTRIAL EQUIPMENT

Industrial equipment is gasoline- or diesel-powered machinery including forklifts, generators, and pumps. According to officials at the U.S. Department of Energy, industrial equipment fuel use is not classified as off-highway but as industrial fuel use in the Energy Data Reports, Sales of Fuel Oil and Kerosine in 1976 (Reference 34). The activity parameter for this category, gallons of fuel consumed, is the product of national industrial equipment fuel use and the ratio of county to national employment in SICs 10-14, 20-39, 50, 51 (Table 3.37). National fuel use was obtained from the U.S. EPA Monitoring and Data Analysis Division (Reference 36). County employment is available in County Business Patterns (References 10, 11, 12). National employment is from the General Summary 1977 Census of Manufacturers (Reference 20) (SICs 20-39) and the U.S. Department of Labor Statistics (Reference 37).[a]

Projection

Industrial equipment fuel use was projected by manufacturing employment.

Emission Factors

Emission factors shown in Table 3.38 were developed from the Compilation of Air Pollutant Emission Factors (Reference 18).

Industrial equipment VOC and NO_x emissions are summarized in Table 3.39.

Allocation

Industrial equipment fuel use was allocated by manufacturing employment.

12. SMALL GASOLINE ENGINES

Information contained in Compilation of Air Pollutant Emission Factors (Reference 18) indicates that 89% of small gasoline engines are used in lawn and garden equipment, while the remainder falls into the miscellaneous category. There are two types of engines available for this purpose: two-stroke and four-stroke. Calls to local dealers revealed that

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[a] National Employment in SICs 10-14, 50, 51 equals $5,521(10)^3$ employees.

TABLE 3.37

1979 INDUSTRIAL EQUIPMENT ACTIVITY

County	Employment SICs 10-14,20-39,50,51	Fuel Use (10^3 gal)	
		Gas	Diesel
Bucks	56,762	989	2,708
Chester	41,407	722	1,976
Delaware	43,432	757	2,072
Montgomery	113,462	1,978	5,414
Philadelphia	190,049	3,313	9,069
Burlington	25,505	444	1,217
Camden	41,776	728	1,993
Gloucester	16,045	280	757
Mercer	33,632	586	1,605
Salem	11,171	195	533
New Castle	36,388	634	1,736
National	24,037[a]	419[b]	1,147[b]

[a] 10^3 employees.
[b] 10^6 gallons.

Source: County Business Patterns (References 10, 11, 12); General Summary 1977 Census of Manufacturers (Reference 20); and U.S. Department of Labor Statistics (Reference 37).

TABLE 3.38

INDUSTRIAL EQUIPMENT EMISSION FACTORS
($lb/10^3$ gal)

Pollutant	Gasoline Equipment	Diesel Equipment
Particulates	6.47	33.5
Carbon Monoxide	3,940	102
Sulfur Oxides	5.31	31.2
Nitrogen Oxides	102	469
VOC	205.65	44.54

Source: Compilation of Air Pollutant Emission Factors (Reference 18), Table 3.3.3-1.

TABLE 3.39

INDUSTRIAL EQUIPMENT EMISSIONS (tpy)

County	1979		1987	
	VOC	NO_x	VOC	NO_x
Bucks	162	685	163	688
Chester	118	500	120	507
Delaware	124	524	126	534
Montgomery	324	1,370	329	1,394
Philadelphia	543	2,296	550	2,325
Burlington	73	308	77	325
Camden	119	504	121	510
Gloucester	46	192	47	198
Mercer	96	406	100	421
Salem	32	135	31	129
New Castle	104	439	109	463

80% of the lawn and garden equipment sold today is four-stroke. Table 3.40 shows the approximate breakdown of small engines by use and also their approximate annual fuel consumption from Compilation of Air Pollutant Emission Factors (Reference 18). Using the information from this table, the weighted average usage per unit-year, 12.7 gallons, was found. In order to account for meteorological differences between Philadelphia and other areas of the nation, a temperature correction was applied to this figure. From Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds (Reference 9), the average number of days in the year when the minimum temperature is greater than 32°F in the study area should be divided by the same figure for the national average. For the Philadelphia AQCR, this factor is 256/250; when applied to the 12.7 gallons per unit-year, the resulting figure is 13.0 gallons per unit-year. From Compilation of Air Pollutant Emission Factors (Reference 18), there are about 0.21 units/person which should be adjusted for the dwelling unit structure distribution. According to the 1970 Census of Housing, Housing Characteristics for States, Cities, and Counties, Pennsylvania (Reference 38), the percent of multiple-unit structures varies from 21.4 in Bucks County to 33.4 in Philadelphia County. The national average as obtained from Statistical Abstract of the United States 1977 (Reference 39) is 26% multiple-unit structures; therefore, the number of units/person, assuming a linear relationship, should vary from 0.163 to 0.255. These values are specified in Table 3.41 for each county in the study area. The table shows adjusted factors and their product, which is the county fuel consumption in this category.

Projections

Fuel usage for this category was projected according to population.

Emission Factors

A weighted average of the emission factors for the three types of engines was calculated according to relative fuel consumption and percent in use shown in Table 3.40. The results are shown in Table 3.42.

County-level VOC and NO_x emissions from small gasoline engines are listed in Table 3.43.

Allocation

Allocation to subcounty grids was performed in proportion to the number of occupied households for 1979 and 1987 as determined from data supplied by DVRPC. The same allocation parameter (dwelling units) was used for allocation in New Castle County based on information supplied by WILMAPCO. The allocation of small gasoline emissions for Salem County was by population because dwelling unit information did not exist.

13. AIRCRAFT

The county activity parameter needed to calculate emissions is the number of landing-takeoffs (LTOs). The New Jersey State Airport System Plan, 1975 Summary Report (Reference 40), the Pennsylvania Statewide

TABLE 3.40

SMALL GASOLINE ENGINE DATA

	Percent in Use	Average Annual Fuel Use (gal/unit)
Four-stroke miscellaneous	11	12.3
Two-stroke lawn and garden	18	20.6
Four-stroke lawn and garden	71	10.8

Source: Calculated from Compilation of Air Pollutant Emission Factors (Reference 18), Table 3.2.5-1.

TABLE 3.41

FUEL CONSUMPTION BY SMALL GASOLINE ENGINES

County	Adjusted Consumption per Unit per Year	Number of Units per Capita	1979 Population	Annual Consumption (1,000 gal)
Bucks	13 gal	0.255	472,803	1,567
Chester	13 gal	0.231	301,727	906
Delaware	13 gal	0.244	612,400	1,943
Montgomery	13 gal	0.221	675,048	1,939
Philadelphia	13 gal	0.163	1,938,900	4,109
Burlington	13 gal	0.243	362,679	1,146
Camden	13 gal	0.248	503,841	1,624
Gloucester	13 gal	0.225	205,991	603
Mercer	13 gal	0.245	333,638	1,063
Salem	13 gal	0.235	67,674	207
New Castle	13 gal	0.219	403,352	1,148

TABLE 3.42

SMALL GASOLINE ENGINES EMISSION FACTORS

Emission Factors (lbs/10^3 gal)				
SO_x	TSP	CO	VOC	NO_x
4.9	19.5	3,783	685	38

Source: Calculated from Compilation of Air Pollutant Emission Factors (Reference 18), Table 3.2.5.1.

TABLE 3.43

SMALL GASOLINE ENGINE EMISSIONS (tpy)

County	1979		1987	
	VOC	NO_x	VOC	NO_x
Bucks	530	23	563	25
Chester	306	7	316	8
Delaware	666	34	692	37
Montgomery	664	31	702	31
Philadelphia	1,407	78	1,413	77
Burlington	387	13	417	14
Camden	556	30	588	31
Gloucester	205	7	227	7
Mercer	361	17	382	17
Salem	69	1	75	1
New Castle	388	20	420	20

Airport System, Technical Report 1 (Reference 41), and the State of Delaware Aviation and Airport System Plan, Technical Supplement (Reference 42) listed airport operations for the following aircraft categories: military, civil, and commercial. LTOs were calculated for each airport in the Philadelphia AQCR by dividing operations by two. Airports were then matched to appropriate counties. For all airports within a county, LTOs for each category (civil, commercial, or military) were added to arrive at county activity parameters.

Projections

The FAA Aviation Forecasts, Philadelphia (Reference 43) provided estimates of growth rates in air traffic for the Pennsylvania counties as follows:

- Civil Aircraft - 3.7%/year
- Commercial Aircraft - 5.5%/year

The New Jersey State Airport System Plan, 1975 Summary Report (Reference 40) and the State of Delaware Aviation and Airport System Plan, Technical Supplement (Reference 42) were utilized for growth estimates in New Jersey and Delaware. Using this information, LTOs for each of these categories were projected to 1979 and 1987. Military aircraft operations were assumed to have no growth, based on conversations with local military officials.

Emission Factors

Air Pollution Emission Factors for Military and Civil Aircraft (Reference 44) provided emission factors by aircraft type. However, a detailed breakdown of LTOs by type of aircraft for each airport was not available. Therefore, specific aircraft emission factors could not be used. The New Jersey State Airport System Plan, 1975 Summary Report (Reference 40), the Pennsylvania Statewide Airport System, Technical Report 1 (Reference 41), and the State of Delaware Aviation and Airport System Plan, Technical Supplement (Reference 42) provided based-aircraft-fleet-mix data for generalized categories of aircraft by airport and year. The categories of aircraft used in the based fleet mix data were then matched to specific aircraft types in Air Pollution Emission Factors for Military and Civil Aircraft (Reference 44) as shown in Table 3.44. By arithmetically averaging individual aircraft type emission factors, one composite emission factor for each aircraft class was developed as shown in Table 3.45.

From the data in these tables, emission factors were then developed at the county level by aircraft category (civil, commercial, and military) for purposes of input to the emission factor file. In order to accomplish this, it was assumed that the civil and commercial LTOs at each airport were proportional to the based aircraft ratios supplied by the State DOTs. For example, at Buehl Field, Bucks County, PA, 90% of the fleet is single engine aircraft, and 10% is twin engine aircraft. Therefore, 90% of the civil and commercial LTOs were attributed to single engine, Class E aircraft, and 10% of each aircraft category was attributed to twin engine, Class D aircraft. Emissions were calculated in this fashion for each airport. Finally, by summing emissions for airports in a particular county

TABLE 3.44

FLEET MIX CLASSIFICATION

Aircraft Description	Aircraft Class	Representative Aircraft Types Used to Calculate Emission Factors	No. of Engines
Heavy Jets	AA	Boeing 707-320B	4
		Boeing 747-200B	4
		Lockheed L1011-200	3
		Lockheed L1011-100	3
		McDonnell Douglas DC-8	4
		McDonnell Douglas DC-10	3
Large Jets	A	Boeing 727-200	3
Small Jets Large Turboprops Piston Transports	B	BAC 111-400	2
		Boeing 737-200	3
		McDonnell Douglas DC-9-50	2
		GD/Convair 580	2
		Fairchild F27 and FH227	2
		Grumman Goose	2
		Lockheed L188 Electra	4
		Lockheed L100 Hercules	4
Heavy Twins	C	Beech 9	2
		Dehavilland Twin Otter	2
		Swearingen Metro-2	2
		Cessna Citation	2
		Dessault Falcon 20	2
		Gates Learjet 24D	2
		Gates Learjet 35,36	2
		Rockwell Shoreliner 75A	2
		Beech B99	2
		Shorts Skyvan 3	2
		Swearingen Merlin 111A	2
Light Twin Engine Aircraft Large Single Engine Aircraft	D	Cessna Skymaster	2
		Piper Navajo Chieftain	2
Light Single Engine Aircraft	E	Cessna 150	1
		Piper Warrior	1

TABLE 3.44--Continued

Aircraft Description	Aircraft Class	Representative Aircraft Types Used to Calculate Emission Factors	No. of Engines
Military Turbine	--	C-5A	4
		C-130	4
		KC-135	4
		C-141	4
Military Twin Piston	--	C-1 Trader	2
		O-2	2
		S-2 Tracker	2
Military Single Piston	--	T-28 Trojan	1
		T-34 Mentor	1
		T-41 Mescelero	1
		O-1 Bird Dog	1
Military Helicopter	--	Iroquois/Huey	1

TABLE 3.45

AIRCRAFT CLASS EMISSION FACTORS

Description	Aircraft Class	Emission Factors (lbs/LTO) TSP	CO	SO_x	NO_x	HC
Commercial and Civil Aircraft						
Heavy Jet	AA	2.04	165.87	5.72	71.81	94.85
Large Jet	A	1.17	55.95	3.27	29.64	13.44
Small Jets & Piston Transports	B	0.38	42.91	1.43	20.57	20.86
Heavy Twin Piston	C	0.46	26.60	0.41	1.38	6.48
Light Twin Piston Large Single Piston	D	0	64.90	0	0.08	1.45
Light Single Piston	E	0	11.34	0	0.02	0.24
Military Aircraft						
Turbine	--	18.21	106.95	4.45	34.26	81.40
Twin Piston	--	0	85.90	0	0.49	10.67
Single Piston	--	0	28.72	0	0.14	2.45
Helicopter (Huey)	--	0	1.55	0.20	1.19	2.53

Source: Calculated from Air Pollution Emission Factors for Military and Civil Aircraft (Reference 44).

and dividing by the appropriate total county LTOs, a county wide emission factor was obtained.

The emission factors for commercial jet aircraft were modified for the 1987 inventory to reflect new federal regulations that are expected to go into effect before 1985. These regulations were published in the Federal Register under Environmental Protection Agency Regulations on the Control of Air Pollution from Aircraft and Aircraft Engines (Reference 45). According to Dr. Munt of the EPA Mobile Source Laboratory, Ann Arbor, Michigan, these regulations imply an overall 90% reduction in VOC emissions, a 60% reduction in CO and a 40% reduction in NO_x nationwide. These percentages apply to commercial jet aircraft in the 1987 inventory only.

County-level VOC and NO_x emissions from aircraft are listed in Table 3.46.

Allocation

Spatial detail information concerning aircraft approach and climbout could not be readily obtained for each airport. In general, consideration was given to airport location within a grid and the primary approach and climbout vectors for each airport.

For smaller airports, the location of the airport within a grid was determined by U.S.G.S. quadrangle maps. If the airport was located near a grid boundary, emissions were split among the affected grid cells. For the Philadelphia International Airport, a more extensive analysis was warranted. The primary direction of landing-takeoffs at this airport is east-west. Aircraft holding patterns are within four miles of the airport at a maximum altitude of 3,000 feet in all approach directions. Emissions were distributed to a total of nine grids based upon this information. Emission factors for the LTO cycle are composed of contributions from idle/taxi, takeoff, approach, and climbout. Data presented in AP-42 (Reference 18) indicate that the approach and climbout components comprise approximately 40% of the total emission factor. Since it is these operational modes that cause emissions outside the grid containing the runways, 40% of the total emissions from Philadelphia International Airport were allocated to the eight surrounding grids. Equal emission levels were assigned to each of the eight grids to reflect the use of all possible approach and climbout directions.

There are no airports, consequently no aircraft emissions in Camden County.

14. VESSELS

The major emission sources in this category are commercial vessels which navigate from the mouth of the Delaware Bay up the Delaware River to the ports of Wilmington, Philadelphia, and Trenton. Recreational vessels were also considered and are composed of two types: diesel and gasoline-powered. Emissions from recreational diesel vessels were calculated and determined to be insignificant relative to larger commercial

TABLE 3.46

AIRCRAFT EMISSIONS (tpy)

County	1979		1987	
	VOC	NO_x	VOC	NO_x
Bucks	59	15	59	13
Chester	26	6	29	6
Delaware	252	261	48	240
Montgomery	153	42	151	42
Philadelphia	807	753	248	698
Burlington	118	23	130	23
Camden	---	---	---	---
Gloucester	409	399	158	378
Mercer	147	57	146	46
Salem	---	---	---	---
New Castle	1,126	1,042	224	951

vessel emissions. Recreational gasoline vessels are used primarily on lakes, rivers, and estuaries, and unlike their diesel-powered counterparts, contributed significantly to overall emissions.

Fuel consumption was determined for two vessel travel modes: underway and inport. Underway commercial vessel fuel consumption was estimated from ton-mile statistics in the Waterborne Commerce of the United States, Calendar Year 1974, Part I Waterways and Harbors Atlantic Coast (Reference 46) and a 590 Btu/ton-mile fuel requirement calculated from The Effect of Fuel Price Increases on Energy Intensiveness of Freight Transport (Reference 47) and Energy Intensiveness of Passenger and Freight Transport Modes (Reference 48). In order to distinguish between diesel and residual oil consumption for underway vessels, a diesel-to-residual fuel use ratio of 9:91 was calculated using the Energy Data Reports, Sales of Fuel Oil and Kerosine in 1976 (Reference 34) for the study area. The intracoastal commercial vessel fuel consumption was apportioned to counties based on linear miles of navigable river.

Inport fuel consumption was obtained by determining the number of ships with draft greater than 18 feet for each of the ports. This information was available in the Waterborne Commerce of the United States, Calendar Year 1974, Part I Waterways and Harbors Atlantic Coast (Reference 46). The following assumptions from Guide for Compiling a Comprehensive Emission Inventory (Reference 49) were used in the calculation of fuel consumption: (1) only vessels with a draft of 18 feet or greater are under their own power while in port, and (2) each vessel is in port an average of three days.

Commercial vessel activity is summarized in Table 3.47.

Activity parameters for gasoline motorboat use were developed using the following equations for inboard and outboard fuel use from Procedures (Reference 9).

Inboard gasoline consumption (gal/yr) = # registered inboards x 3 gal/hr x 10 (C) hr/yr

Outboard gasoline consumption (gal/yr) = # registered outboards x 1.5 gal/hr x 10 (C) hr/yr

where: C = the number of months during which the monthly mean temperature exceeds 48°F.

A seven month boating season was used in these calculations.

Motorboat registrations were reported differently in each of the three states so that varying assumptions were needed. In Pennsylvania, PennDER (Reference 50) reported the total number of registered inboards and outboards in the state for the following size classifications: 16 ft and less; 17-25 ft; 26-40 ft; 41-65 ft. as shown in Table 3.48. It was assumed that 50% of the inboard boats greater than 25 ft in length were gasoline-powered and the remainder diesel-powered (0.4% of the total). This information was then used to calculate the gasoline-powered inboard/outboard split for total registrations listed in Table 3.49.

TABLE 3.47

COMMERCIAL VESSEL ACTIVITY
(10^4 gallons)

County	1979		1987	
	Diesel	Residual	Diesel	Residual
Bucks	4	42	5	47
Chester	---	---	---	---
Delaware	47	445	53	504
Montgomery	---	---	---	---
Philadelphia	114	1,129	130	1,281
Burlington	29	290	33	329
Camden	69	674	78	764
Gloucester	76	724	86	820
Mercer	1	9	1	10
Salem	120	1,139	137	1,292
New Castle	145	1,489	164	1,689

TABLE 3.48

PENNSYLVANIA STATE TOTAL MOTORBOAT REGISTRATIONS (1978)

Size	Inboard	Outboard
16 ft. and less	822	114,310
Aux. Sail	3	956
17-25 ft.	10,781	29,228
Aux. Sail	26	1,577
26-40 ft.	1,209	510
Aux. Sail	50	49
41-65 ft.	108	18
Aux. Sail		1

Source: Fish Commission, Pennsylvania Department of Environmental Resources (Reference 50).

TABLE 3.49

PENNSYLVANIA COUNTY MOTORBOAT POPULATION

County	Total	Gasoline	
		Inboard	Outboard
Bucks	6,762	488	6,246
Chester	2,178	158	2,010
Delaware	2,899	210	2,678
Montgomery	5,368	387	4,959
Philadelphia	3,894	281	3,597

Source: Fish Commission, Pennsylvania Department of Environmental Resources (Reference 50).

In New Jersey, the number of boats less than 22 ft and 22 ft and greater in length were reported by county in the Survey of New Jersey's Registered Motorboat Fleet (Reference 51). Based on information obtained from PennDER (Reference 50), all boats less than 22 ft and 50% of the boats greater than or equal to 22 ft in length were assumed to be gasoline outboard. Twenty-five percent of the boats 22 ft or greater in length were assumed to be gasoline inboard.

In Delaware, DelDNREC (Reference 52) reported the total number of boats registered in the State and in New Castle County (20% of State total). Again, using the information from PennDER, 95% of the boats in New Castle County were assumed to be gasoline outboard and 5% were assumed to be gasoline inboard. Motorboat registrations for New Jersey and Delaware are listed by county in Table 3.50. Annual gasoline consumption of recreational vessels is listed by county in Table 3.51.

Projections

Historical trends in ton-miles of traffic were analyzed from data in Waterborne Commerce of the United States, Calendar Year 1974, Part I Waterways and Harbors Atlantic Coast (Reference 46). Projection factors for ton-miles were applied to the base year fuel data to estimate projection year fuel consumption by commercial vessels. This resulted in a 13% increase from 1979 to 1987 for both diesel oil use and residual oil use.

Pleasure boat fuel consumption was projected to increase in proportion to population.

Emission Factors

The emission factors shown in Table 3.52 are taken from Compilation of Air Pollutant Emission Factors (Reference 18) for commercial vessels. They are weighted between hoteling and cruising modes in a 14:86 ratio for residual fuel and a 23:77 ratio for distillate fuel. These ratios are based on calculations of fuel consumed inport versus underway. The SO_x emission factors in Table 3.52 for diesel and residual powered vessels account for the sulfur content of these fuels. The diesel factor includes a sulfur content of 0.2% from AP-42 (Reference 18). The residual factor includes a sulfur content of 3% based on the assumption that this grade of fuel would be used since its cost is much less than the cost of low sulfur residual oil.

Emission factors obtained from Compilation of Air Pollutant Emission Factors (Reference 18) for gasoline recreational vessels were weighted 5% for inboard vessels and 95% for outboard vessels based on information from PennDER (Reference 50).

County-level VOC and NO_x emissions from vessels are summarized in Table 3.53.

Allocation

Allocation was made in proportion to linear miles of navigable river within each grid. Size of harbor and dock space was considered in order

TABLE 3.50

NEW JERSEY AND DELAWARE COUNTY MOTORBOAT POPULATION (1977)[a]

County	Size			Gasoline	
	21 ft. and Less	Over 21 ft.	Total	Inboard	Outboard
New Jersey					
Burlington	2,838	97	2,935	24	2,886
Camden	523	97	620	24	572
Gloucester	800	0	800	0	800
Mercer	812	14	826	4	819
Salem	1,163	14	1,177	4	1,170
Delaware					
New Castle	-----		9,447	474	9,003

[a] Delaware - 1976 information.

Source: Survey of New Jersey's Registered Motorboat Fleet (Reference 51). Boating Administration, Delaware Department of Natural Resources and Environmental Control (Reference 52).

TABLE 3.51

ANNUAL GASOLINE CONSUMPTION OF MOTORBOATS (GALLONS)

County	1979	1987
Bucks	758,310	805,383
Chester	244,230	251,345
Delaware	325,290	338,159
Montgomery	601,965	637,586
Philadelphia	436,695	438,593
Burlington	316,577	338,903
Camden	66,633	70,697
Gloucester	87,548	95,789
Mercer	88,680	93,443
Salem	126,236	138,652
New Castle	1,068,894	1,145,501

TABLE 3.52

WEIGHTED VESSEL EMISSION FACTORS

	Emission Factors				
	TSP	CO	SO_x	NO_x	VOC
Commercial Vessels[a]					
Diesel	150	40.0	284.0	232.8	30.0
Residual	186	29.67	4770.0	530.8	10.34
Recreational Vessels[b]					
Gasoline	---	3192.0	6.4	12.82	1049.0

[a] lbs/10^4 gallons burned.
[b] lbs/10^3 gallons burned.

Source: Compilation of Air Pollutant Emission Factors (Reference 18), Tables 3.2.3-2, 3.2.3-5, and 3.2.4-1.

TABLE 3.53

VESSEL EMISSIONS (tpy)

	1979				1987			
	Commercial		Recreational		Commercial		Recreational	
County	VOC	NO_x	VOC	NO_x	VOC	NO_x	VOC	NO_x
Bucks	--	12	398	5	--	13	422	5
Chester	--	---	128	2	--	---	132	2
Delaware	3	124	170	2	3	140	177	2
Montgomery	--	---	316	4	--	---	335	4
Philadelphia	8	313	229	3	9	355	230	3
Burlington	2	80	166	2	2	91	178	2
Camden	5	187	35	-	5	212	37	-
Gloucester	5	201	46	1	6	228	50	1
Mercer	--	3	47	1	--	3	49	1
Salem	8	316	66	1	9	359	73	1
New Castle	10	412	561	7	11	467	601	7

to account for inport emissions. For the less important category of recreational vessels, a simpler process of allocation was applied. Each grid that contained any portion of a river or lake used for recreational purposes was allocated an equal share of recreational vessel emissions.

Chester County borders neither the Delaware Bay nor the Delaware River. Consequently, no commercial vessel emissions were assigned to this county.

15. RAILROADS

Emissions from this category come from locomotive engine use, either for transportation or during switching operations. Because of the varying sources of data, railroad activity was determined separately for each state. The New Jersey SIP provided activity levels (gallons of diesel fuel used) through back calculation of emissions data. Its data source was the Regional Emission Inventory and Sulfur Dioxide Alternatives for the Metropolitan Philadelphia AQCR (Reference 2) which allocated state fuel totals down to the county level. The Pennsylvania Public Utility Commission in its Annual Report of Railroads 1975-1976 (Reference 53) provided estimates of fuel consumed by railroad operations. In Delaware, the Mineral Industry Surveys, Sales of Fuel Oil and Kerosine in 1975 (Reference 33) provided fuel data for the state. This was proportioned to New Castle County in accordance with its length of track compared to the state.

Projections

New Jersey railroad activity projections were taken directly from the New Jersey SIP. Its figures were based on information provided by the New Jersey Department of Transportation.

The Pennsylvania SIP provided growth factors which were specific to the five-county southeast Pennsylvania area. These factors are shown in Table 3.54. They are based on employment levels of locomotive engineers and engineer helpers in Pennsylvania Occupational Projections (Reference 54).

In Delaware, a 3.5% annual growth rate was used based on information provided by the Association of American Railroads.

Emission Factors

Emission factors were taken from Compilation of Air Pollutant Emission Factors (Reference 18). These emission factors, which are based on national statistics, are listed in Table 3.55.

County-level VOC and NO_x emissions from railroad locomotives are listed in Table 3.56.

Allocation

Allocation was by railroad track miles as determined from U.S.G.S. quadrangle maps. Depending upon the geographical area, emissions were

TABLE 3.54

RAILROAD GROWTH FACTORS FROM PENNSYLVANIA SIP

1976-1979	1979-1987
1.0120	1.0305

TABLE 3.55

RAIL LOCOMOTIVE EMISSION FACTORS

Pollutant	Average Emission Factor ($\text{lbs}/10^4$ gal)
TSP	250
CO	1,300
SO_x	570
NO_x	3,700
VOC	1,065

Source: Compilation of Air Pollutant Emission Factors (Reference 18), Table 3.2.2-1.

TABLE 3.56

RAILROAD LOCOMOTIVE EMISSIONS (tpy)

County	1979		1987	
	VOC	NO_x	VOC	NO_x
Bucks	319	1,108	324	1,138
Chester	211	718	213	743
Delaware	431	1,502	445	1,545
Montgomery	404	1,395	414	1,427
Philadelphia	1,242	4,311	1,277	4,439
Burlington	138	473	138	473
Camden	196	688	205	715
Gloucester	77	264	82	288
Mercer	129	447	135	461
Salem	31	112	31	108
New Castle	32	105	41	131

reduced or completely eliminated to account for electrified tracks. Switching yards were allocated higher emissions because of the greater density of locomotives in these areas.

16. FOREST FIRES

The state departments of forestry were able to provide recent data (1978-1979) on acres consumed by wildfires in each county. A fuel loading of 11 tons/acre was assumed, as suggested in Compilation of Air Pollutant Emission Factors (Reference 18).

Projections

The method of projection differed in each state because of the differences in available data. The New Jersey Bureau of Forestry provided data for 1982 and 1987. Projection data were not available from Pennsylvania. Therefore, it was assumed that forest wildfires would remain unchanged in projection years. The Delaware Department of Forestry provided historical data on wildfires over the last 10 years. No trend could be discerned from the data. Therefore, the average forest fire figures over the 10-year period of 42 acres/year was assumed for New Castle County.

Emission Factors

Emission factors were taken directly from the Aerometric and Emissions Reporting System (Reference 55) and are shown in Table 3.57.

Forest fire VOC and NO_x emissions are listed in Table 3.58.

Allocation

Allocation was made to all grids containing forest land. The amount of forest per grid was estimated using both maps from the U.S.G.S. and from The Timber Resources of Pennsylvania (Reference 56), The Timber Resources of New Jersey (Reference 57), and The Timber Resources of Delaware (Reference 58).

17. AGRICULTURAL BURNING

Agricultural burning and record-keeping practices differed in each state and consequently each state was considered separately in the calculation of activity parameters. NJDEP provided permit data on three types of agricultural burning: infested plants, herbaceous material (asparagus field burning), and orchard prunings. Based on conversations with NJDEP agricultural officials, the following assumptions were made in order to calculate tons of material burned of each type:

- Five cords of wood per orchard pruning permit
- Ten acres of land per herbaceous material permit
- One ton of material per infested plant permit

TABLE 3.57

FOREST FIRE EMISSION FACTORS
(lbs/ton)

TSP	CO	NO_x	VOC
17	140	4	24

Source: Aerometric and Emissions Reporting System (Reference 55).

TABLE 3.58

FOREST FIRE EMISSIONS (tpy)

County	1979		1987	
	VOC	NO_x	VOC	NO_x
Bucks	---	---	---	---
Chester	4	1	4	1
Delaware	1	---	1	---
Montgomery	1	---	1	---
Philadelphia	---	---	---	---
Burlington	260	43	475	79
Camden	130	22	241	40
Gloucester	60	10	107	18
Mercer	---	---	---	---
Salem	50	8	93	15
New Castle	6	1	6	1

The tons of each type of material burned were added in order to obtain the category activity parameter.

Delaware agricultural officials reported that there had been seven burning permits issued through September 1979 in New Castle County for the burning of brush in conservation districts and for the burning of agricultural fields. A weighted average fuel loading of 10 tons per acre was determined using information supplied in Compilation of Air Pollutant Emission Factors (Reference 18). Based on conservations with Delaware agricultural officials, it was assumed that:

- o Ninety percent of the burning was unspecified weeds.
- o Ten percent of the burning was unspecified forest residue.

No data were available on agricultural burning in Pennsylvania. PennDER officials revealed that burning is unregulated. In order to arrive at an estimate, the following proportional relationship was assumed:

$$\frac{\text{Tons of Agricultural Material Burned in New Jersey}}{\text{Acres of Cropland in New Jersey}} \times \text{Acres of Cropland in Each Pennsylvania County} = \text{Tons of Material Burned in Each Pennsylvania County}$$

AMS personnel indicated that no agricultural burning of any kind is conducted in Philadelphia County.

Projections

Projections of agricultural burning were made using the same compound growth factors developed for agricultural fuel use.

Emission Factors

Emission factors were derived for the New Jersey Counties from the Compilation of Air Pollutant Emission Factors (Reference 18). Factors for asparagus field burning were taken directly from AP-42. Factors for unspecified field crops were assumed to apply to infested plant burning. Emission factors for pear waste burning were applied to the orchard pruning category. Pear waste burning emission factors represent an average value of the orchard pruning emission factors. The Pennsylvania emission factor came from the unspecified agricultural burning category in Compilation of Air Pollutant Emission Factors (Reference 18). These emission factors are shown in Table 3.59. In New Jersey, emission factors were weighted according to the relative amounts of each type of burning.

Emission factors for Delaware were obtained from AP-42 and are shown in Table 3.60. The final emission factors were weighted 90% for unspecified weeds and 10% for unspecified forest residue based on conversations with DelDNREC officials.

Base year VOC emissions (tons) were as follows: Bucks - 6, Burlington - 3, Camden - 1, Chester - 7, Delaware - 1, Gloucester - 10, Mercer - 1, Montgomery - 3, New Castle - 1, Philadelphia - 0, and Salem - 8. Emissions

TABLE 3.59

AGRICULTURAL BURNING EMISSION FACTORS

State	Types of Burning	Emission Factors (lbs/ton) TSP	CO	VOC
New Jersey	Herbaceous	40	150	85
New Jersey	Infested	21	117	23
New Jersey	Orchard	9	57	9
Pennsylvania	Unspecified	21	117	23

Source: Developed from information in Compilation of Air Pollutant Emission Factors (Reference 18), Table 2.4-2.

TABLE 3.60

AGRICULTURAL BURNING EMISSION FACTORS FOR NEW CASTLE COUNTY, DELAWARE

Type of Burning	Emission Factors (lbs/ton)		
	TSP	CO	VOC
Unspecified Weeds	15	85	12
Unspecified Forest Residue	17	140	24

Source: Compilation of Air Pollutant Emission Factors (Reference 18), Table 2.4-2.

for 1987 changed for three counties: Chester - 9, Gloucester - 11, and Salem - 10. There were no county-level NO_x emissions in either the base or projection years.

Allocation

Allocation was made to cropland in all counties. This was estimated from U.S.G.S. quadrangle maps and conversations with local agricultural officials.

18. PRESCRIBED BURNING

This category includes the deliberate burning of fields or other areas for clearing purposes. Local forestry officials from the states of Pennsylvania and New Jersey were able to provide information on amounts of burning. Delaware officials revealed that no prescribed burning occurs in New Castle County.

Pennsylvania officials provided estimates of total acres burned. They stated that most burning was for purposes of clearing brush from railroad beds. In addition, they estimated the percentage of burning in each county as follows: Bucks County, 10%; Chester County, 70%; Delaware County, 10%; and Montgomery County, 10%. A fuel loading factor for unspecified forest residue of 70 tons/acre was selected from Compilation of Air Pollutant Emission Factors (Reference 18) Table 2.4-2. This figure was found from the unspecified forest residue category of fuel loading factors.

New Jersey officials provided data on tons of material burned by county. Most of this material was brush clearing for five zone buffers in Burlington County, which contains large areas of pine forest.

Projections

Projection year data were assumed to be the same as base year data in Pennsylvania and Delaware, as per local officials. In New Jersey, forestry officials provided projection year data.

Emission Factors

Emission factors for unspecified forest residue (lbs/ton of material burned) were taken directly from Compilation of Air Pollutant Emission Factors (Reference 18) Table 2.4-2 as follows: TSP-17, CO-140, and VOC-24.

Total VOC emissions in the base year were 1 ton each in Delaware and Montgomery Counties, 31 tons in Chester County, and 262 tons in Burlington County. Projection year emissions were equal to base year emissions in Pennsylvania as described above. Projected VOC emissions in Burlington County are 532 tons in 1987. There were no NO_x emissions in either the base or projection year.

Allocation

In New Jersey, allocation to subcounty grids was based on the percent of forest acreage within the grid relative to the county. Because of the nature of the data provided by Pennsylvania officials, prescribed burning was allocated to grids in proportion to railroad track length. These data were acquired from U.S.G.S. quadrangle maps.

19. ON-SITE INCINERATION

In the Philadelphia AQCR, incinerators may be classified as industrial or commercial. All incinerators in the Pennsylvania section of the study area are registered and, therefore, are listed in the point source inventory. In New Castle County, Delaware, there are two registered industrial incinerators which are already accounted for in the point source inventory, and there are nine sanitary landfills which handle a large portion of the solid waste. As stated in the Development of Particulate, SO_2, and VOC Emissions Inventories and Source-Receptor Relationships for Delaware (Reference 1), the emissions in New Castle County for this category are zero.

For New Jersey, a previous study entitled New Jersey Area Source VOC and NO_x Emissions Inventory for Selected Counties and Categories (Reference 30) was used. In this study, average waste factors per employee classification were developed from NJDEP records and four-digit SIC employment information from County Business Patterns 1976 New Jersey (Reference 59). Specifically, the following two ratios were used: 0.2149 tons per commercial employee for commercial waste and 0.0706 tons per hospital employee for pathological waste.

Projections

For the 1987 inventory, the same activity parameters were used as for the base year. New Jersey, which is the only state with emissions for this category, requires that all new incinerators be registered; therefore, all new emissions are covered in the point source projection. The emissions for this category represent unregistered incinerators; any increases in loading of these units would be offset by the possibility of another such incinerator ceasing operation.

Emission Factors

Table 3.61 shows the emission factors used for incinerators. They were taken from Compilation of Air Pollutant Emission Factors (Reference 18).

County-level VOC and NO_x emissions from on-site incineration are listed in Table 3.62.

Allocation

Allocation for this category was made in accordance with commercial employment since specific incinerator locations were unavailable.

TABLE 3.61

INCINERATOR EMISSION FACTORS

Pollutant	Emission Factor ($lbs/10^2$ ton burned)
TSP	700
SO_x	250
CO	1,000
VOC	300
NO_x	300

Source: Compilation of Air Pollutant Emission Factors (Reference 18), Table 2.1-1.

TABLE 3.62

ON-SITE INCINERATION EMISSIONS[a] (tpy)

County	VOC	NO_x
Burlington	4	4
Camden	13	13
Gloucester	1	1
Mercer	8	8
Salem	--	--

[a] Represents both 1979 and 1987 emissions.

20. OPEN BURNING

The emissions included in this category are from fire training exercises and the burning of solid waste. Land clearing operations have been included in the prescribed burning category.

Available information for open burning was very limited. In the New Jersey Area Source VOC and NO_x Emissions Inventory for Selected Counties and Categories (Reference 30), several officials at NJDEP were surveyed to get an indication of the frequency of illegal open burning. The conclusion was that none of any significance was believed to occur. Likewise, each county in Pennsylvania has strictly enforced ordinances against open burning. Another study, Development of Particulate, SO_2, and VOC Emissions Inventories and Source-Receptor Relationships for Delaware (Reference 1), notes that New Castle County prohibits open burning of any type.

The only open burning figures available are for certain counties in New Jersey where emissions from fire training exercises have been estimated in New Jersey Area Source VOC and NO_x Emissions Inventory for Selected Counties and Categories (Reference 30). Average emissions were found to be less than one ton of VOC per county per year and were assumed to be negligible. Therefore, no emissions were assigned to this category.

21. STRUCTURAL FIRES

In none of the three states in the study area is there a centralized system of reporting fires to any state department or agency. The New Jersey Statewide Arson Network System Newsletter - July 1976 (Reference 60) and the New Jersey Statewide Arson Network System Newsletter - July 1978 (Reference 61) were examined to determine the number of fires occurring in residences, mercantile establishments, and industrial structures. The number of fires that occurred were tabulated for each New Jersey county.

In order to obtain Pennsylvania data, the fire marshall for each county was contacted. Each fire marshall provided data for 1978-1979 regarding the nature of the fire alarms to which their respective fire companies responded. Based on these records and subsequent conversations with each fire marshall, the number of structural fires was determined.

No local structural fire data were available in Delaware. The factor of six fires per 1,000 people figure suggested in Procedures (Reference 9) was utilized for New Castle County. Activity parameters are shown in Table 3.63.

Projections

The number of structural fires were projected by population. Due to the non-residential nature of some fires, this allocation parameter was thought to be slightly better than the number of dwelling units.

TABLE 3.63

NUMBER OF STRUCTURAL FIRES BY COUNTY

	1979	1987
Burlington	1,363	1,459
Camden	969	1,028
Gloucester	215	235
Mercer	433	456
Salem	282	310
Bucks	1,000	1,062
Chester	3,480	3,581
Delaware	2,930	3,046
Montgomery	3,854	4,082
Philadelphia	7,179	7,120
New Castle	2,420	2,594

Emission Factors

Compilation of Air Pollutant Emission Factors (Reference 18) does not specifically address structural fire emission factors. The emission factors in Table 3.64 were acquired from the Aerometric and Emissions Reporting System (Reference 55) and were used for the calculation of structural fire emissions.

County-level VOC and NO_x emissions from structural fires are summarized in Table 3.65.

Allocation

Allocation was by dwelling units for all counties except Salem. In this county, allocation was performed in accordance with population, since dwelling unit information was not available at the subcounty level.

TABLE 3.64

EMISSION FACTORS USED FOR STRUCTURAL FIRES

Pollutant	Emission Factor (lbs/fire)
TSP	143
CO	582
NO_x	17.0
VOC	107
SO_x	0.4

Source: Aerometric and Emissions Reporting System (Reference 55).

TABLE 3.65

STRUCTURAL FIRE EMISSIONS (tpy)

County	1979		1987	
	VOC	NO_x	VOC	NO_x
Bucks	43	3	48	3
Chester	181	20	188	20
Delaware	156	24	159	24
Montgomery	202	24	217	28
Philadelphia	384	58	380	59
Burlington	69	7	74	7
Camden	50	6	52	7
Gloucester	7	---	7	---
Mercer	18	2	19	2
Salem	11	---	12	---
New Castle	126	17	137	20

CHAPTER 3

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CHAPTER 4

VOC AND NO_x PROFILES

In order to provide the pollutant detail required by the Airshed Model and for the RAPS reactivity scheme, data files with VOC and NO_x profiles were generated for both area and point sources. These data files (Appendix D) contain breakdowns by NEDS source classification code (SCC) showing the typical component makeup of VOCs and NO_x for each source. Components tabulated for NO_x emissions were NO and NO_2. The components tabulated for VOC emissions were:

- Paraffins
- Olefins
- Aromatics
- Carbonyls
- Ethylene
- Diolefins
- Alcohols
- Acetates
- Methane
- Aldehydes
- Other

For each component, the percent by weight and the average molecular weight were obtained. The aldehydes component, which makes up part of the carbonyl category, was used only in a correction procedure explained under a separate heading later in this chapter (page 4-7). Both diolefins and ethylene are subsets of the olefin category. Therefore, a total of 100 weight percent is obtained by adding the component percents for paraffins, olefins, aromatics, carbonyls, alcohols, acetates, methane, and "other." The "other" category was defined to include only those VOC compounds that are largely unreactive. Information acquired from EPA's Source Receptor Analysis Branch (SRAB), Model Application Section, at Research Triangle Park, North Carolina, identified individual species which were to be considered unreactive for modeling purposes. They are shown in Table 4.1. A few species which did not fit into any of the stipulated classifications were also analyzed and categorized by SRAB. In some cases these classifications were approximations, since the given compound had characteristics applicable to more than one category. A list of these compounds and their classifications is provided in Table 4.2.

While gathering data for the development of emissions input to the Airshed Model, several plants were visited to obtain emissions information. At each plant, questions were raised as to whether VOC or NO_x component data were available. No species data were provided by any of these sources. (Chapter 2 gives a complete list of plants visited.) Since information was not available directly from the individual plants, two major data sources were used in compiling pollutant splits for VOC.

TABLE 4.1

UNREACTIVE VOLATILE ORGANIC COMPOUNDS AS DEVELOPED BY THE SOURCE RECEPTOR ANALYSIS BRANCH/OAQPS[a]

Methane
Ethane
1,1,1 Trichloroethane
Trichlorotrifluoroethane
Dichlorodifluoromethane

Trichlorofluoromethane
1,1,2 Trichloroethane
All Dichloroethanes
All Trichloroethanes
Dichloromethane

Dibromoethane
Monochloromethane
Chloroethane
Trichloromethane
Dibromomethane

Carbon Tetrabromide
Benzene
Acetylene
Acetonitrile
Methyl Acetate

Dimethyl Formamide
Ethylene Oxide
Phenol
Monochlorobenzene
Trimethylfluorosilane
Perchloroethylene

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[a] All unreactive compounds are classified as "other," except for methane, which is treated separately.

TABLE 4.2

CLASSIFICATION OF MISCELLANEOUS COMPOUNDS FOR USE IN THE URBAN AIRSHED MODEL[a]

Compound	Class
glycol ether	acetate
vinyl chloride	ethylene
n-butyl acetate	acetate
ethyl acrylate	acetate
propylene oxide	alcohol
acrylonitrile	paraffin
ethyl chloride	other unreactive
xylene based acids	aromatic
butyl cellosolve	acetate
ethyl ether	aldehyde
lactol spirits	paraffin
trichloroethylene	ethylene
perchloroethylene	other unreactive

[a] As developed by the Source Receptor Analysis Branch, OAQPS.

These were the KVB Engineering, Inc., VOC Species Data Manual (Reference 1) and RAPS Point and Area Source Organic Emission Inventory (Reference 2). (Hereafter, these data sources will be referred to as KVB and RAPS.) Since the KVB data address more categories and give more detailed component breakdowns, they were used extensively. RAPS data were used mainly for source categories not found in KVB. The KVB data were acquired through source testing in California. For the categories of gasoline combustion and evaporation, differences expected in gasoline composition between the California and Philadelphia areas were taken into account.

The KVB study split VOC emissions into seven chemical classification categories and reported the chemical name, molecular weight, weight percent, and volume (molar) percent of the compounds emitted by a particular process. This detailed information facilitated the allocation of pollutants into the form required by the Airshed Model.

The RAPS study split VOC emissions into five major categories: nonreactives, paraffins, olefins, aromatics, and aldehydes which were further split into species subcategories such as C_1-C_3 paraffins. Specific chemical names were rarely given, but the category and subcategory titles were sufficient to allocate emissions into the categories required by the model. Mole percent and weight percent were given for individual species subcategories. An overall average molecular weight of the emissions was also given. Subcategory molecular weights were calculated by the equation:

$$(\text{Molecular Weight})_i = \frac{(\text{Weight Fraction})_i}{(\text{Mole Fraction})_i} \times \begin{array}{l}\text{Total Average}\\ \text{Molecular Weight}\end{array}$$

where: i denotes an individual subcategory

The RAPS subcategory C_1-C_3 includes the compounds methane, ethane, and propane. The emissions of this subcategory must be split for modeling purposes into the classifications of methane, unreactive, and paraffins. The relative amounts of the three compounds were calculated based on their individual molecular weights and the C_1-C_3 subcategory average molecular weight.

Table 4.3 specifies the data collected for each applicable SCC and placed in the VOC/NO_x profile data files. Table 4.4 shows the equations used to relate these data to the VOC reactivity class emission rates for the Airshed Model and the RAPS reactivity schemes. A more detailed description of this procedure is provided in Chapter 6.

The final component factor files for VOC and NO_x are given in Appendix D. The documentation for these component breakdowns is presented in the remainder of this chapter.

ALTERNATIVE SPECIATION AND DEVELOPMENT

Collecting detailed speciation data and making the calculations of Table 4.4 provides gram-moles of emissions for the five reactivity classes considered by the model. The Carbon-Bond Mechanism, an alternate means of recording speciation data directly into the format required by the

TABLE 4.3

DATA FOR DERIVING AIRSHED MODEL ORGANIC BREAKDOWNS

Weight Percents	Average Molecular Weights
Paraffins	Paraffins[a]
Olefins[b]	Olefins
Aromatics	Aromatics
Carbonyls[c]	Carbonyls
Ethylene	-
Diolefins	Diolefins
Alcohols	Alcohols
Acetates	Acetates
Methane[a]	-
Other[a]	Other[a]
Aldehydes[d]	-

[a] This information is intended for use in the Northeast Corridor Regional Modeling Program.

[b] Includes both diolefins and ethylene.

[c] Includes aldehydes and ketones, but not esters.

[d] Used in adjusting total emissions, not in organics splits.

TABLE 4.4

EQUATIONS FOR COMPUTING ORGANIC CATEGORIES

Category Name	Equation
Airshed Model Scheme (units are gram-moles)	
PAR	$\frac{\text{mass}^{a}\ \text{olefins}}{14}\left(\frac{\text{MW}^{b}\ \text{olefins} - 28}{\text{MW olefins}}\right) - 2\left(\frac{\text{mass diolefins}}{\text{MW diolefins}}\right)$ $+ \frac{\text{mass carbonyls}}{14}\left(\frac{\text{MW carbonyls} - 30}{\text{MW carbonyls}}\right)$ $+ \frac{\text{mass aromatics}}{14}\left(\frac{\text{MW aromatics} - 78}{\text{MW aromatics}}\right)$ $+ \frac{\text{mass alcohols}}{14}\left(\frac{\text{MW alcohols} - 16}{\text{MW alcohols}}\right)$ $+ \frac{\text{mass acetates}}{14}\left(\frac{\text{MW acetates} - 44}{\text{MW acetates}}\right)$ $+ \frac{\text{mass paraffins}}{14.5}$
OLE	$\frac{\text{mass olefins}}{\text{MW olefins}} + \frac{\text{mass diolefins}}{\text{MW diolefins}} - \frac{\text{mass ethylene}}{28}$
ARO	$\frac{\text{mass aromatics}}{\text{MW aromatics}}$
CARB	$\frac{\text{mass carbonyls}}{\text{MW carbonyls}} + \frac{\text{mass acetates}}{\text{MW acetates}}$
ETH	$\frac{\text{mass ethylene}}{28}$
RAPS Scheme (units are grams)	
RAPSPARA	mass paraffins + mass alcohols + mass acetates
RAPSOLEF	mass olefins
RAPSCARB	mass carbonyls
RAPSAROM	mass aromatics

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[a] Mass = percent by weight x total VOC emissions.
[b] MW = molecular weight.

model, was discussed in an April 1980 memo from SRAB to AMTB. In this memo, the carbon-bond classification of 130 individual compounds was given as moles of each bond category per mole of compound. At the suggestion of SRAB, this method was used to speciate emissions from the nine source categories in Table 4.5. Values were supplied by SRAB that gave the desired gram-moles of each reactivity class when input to the equations of Table 4.4.

Speciation data for the nine source categories classified by this Carbon-Bond Mechanism are discussed later in this chapter and presented in Table 4.5.

ALDEHYDE CORRECTION PROCEDURE

The VOC emission factors for stationary and mobile nonevaporative sources were largely developed using gas chromatography. With a total hydrocarbon analyzer and an FID, formaldehyde is virtually not measured while the higher molecular weight aldehydes are detected with a carbon equivalency ratio of something less than 1.0. Similarly, ketones, particularly acetone, and other oxygenated organics are not measured in proportion to their presence. Most evaporative sources, whose emission factors have generally been developed on the basis of materials balance calculations, are unaffected.

To correct the underestimation of the carbonyl weight percents, the total VOC emissions were adjusted prior to splitting them into organics categories. Using the weight percent of formaldehyde from KVB (Reference 1), the following correction was applied on an SCC-by-SCC basis:

$$\text{Adjusted VOC Emissions} = \text{VOC Emissions} \times \frac{100}{100 - \text{wt\% formaldehyde}}$$

Formaldehyde was selected as the correction factor because it is the best estimate of the unmeasured carbonyls. Also, KVB reports all aldehydes as formaldehyde (HCHO). Use of the carbonyls category (defined as ketones and aldehydes in KVB) might tend to overcompensate for some nonevaporative source categories with significant emissions of acetone. Acetates, which contain one carbonyl bond, are not affected since these compounds are associated with evaporative sources, primarily surface coating, for which materials balance calculations have been used for emission factor development.

Several source categories with aldehyde emissions did not require correction. These categories report aldehyde emission factors explicitly in AP-42 (Reference 3). Such categories included bituminous coal combustion, agricultural equipment (gas and diesel), construction equipment (gas and diesel), small gasoline engines, and diesel locomotives. In cases where a combined emission factor which includes aldehydes was used, no further aldehyde correction was made.

TABLE 4.5

POLLUTANT SPLITS SUPPLIED BY SRAB

Source Category	Carbon-Bond Class Emissions (g-moles)				
	PAR MW=14.5	OLE MW=28	ARO MW=78	CARB MW=30	ETH MW=28
Architectural Surface Coating	71.1		9.4	14.9	
Cold Cleaning Degreasing	50.2	1.2	6.3	15.5	1.2
Vapor Degreasing		9.9			9.9
Commercial/Consumer Solvent	65.6			6.9	
Gasoline Marketing (Evaporation)	92.8	1.7	0.6	4.8	
Evaporative Mobile Sources	5.9	0.1	0.1	0.4	
Exhaust Mobile Sources	2.7	0.2	0.2	0.4	0.4

HALOGENATED HYDROCARBON CORRECTION PROCEDURE

Several source categories emit halogenated hydrocarbons. To incorporate these emissions into the Airshed Model, an adjustment in the weight percent contribution of these compounds was needed so that the halogen atoms were not treated as reactive carbon atoms. The paragraph below outlines the procedure for obtaining the proper input for profiles containing these compounds.

The number of moles of carbon atoms predicted by dividing the compound molecular weight by the "average carbon bond weight" (14.5 for paraffins or 14 for olefins) is divided into the number of carbon atoms actually present in the compound. The resulting fraction is multiplied by the weight percent of the halogenated hydrocarbon. The net result is to reduce the weight percent contribution of the halogen atoms to more accurately reflect the actual percent contribution of reactive carbon atoms. For example, the compound trichloroethylene which is classified as ethylene has a molecular weight of 131.4, but the compound contains only 2 carbon atoms. Dividing the molecular weight by the average carbon bond weight for olefins results incorrectly in 131.4/14 = 9.4 moles of carbon atoms per mole of compound. To adjust for halogens, only 2/9.4 of the weight percent contribution of trichloroethylene was allocated to the carbon bond scheme by inclusion into the ethylene and olefin categories.

AREA SOURCE COMPONENT SPLITS

This section discusses area source component splits for VOC and NO_x.

Volatile Organic Compounds

In general, KVB was used as extensively as possible for area source VOC splits. RAPS was used when a more specific KVB table was not available. This section documents the assumptions made for more significant categories which did not correspond exactly to the list of sources in either KVB or RAPS.

For all categories of anthracite and bituminous fuel use, Table A-1, "Fuel Combustion", in the RAPS document (Reference 2) was used. No KVB component splits specific to coal were available. For the wood-burning fuel category, the split for forest fires (KVB Table 6-13-081) was used. The components identified as "unidentified hydrocarbons" were assumed to be all paraffins, as requested by the Source Receptor Analysis Branch, OAQPS.

The on-site incineration component factors (RAPS Table A-18, "Waste Incineration") were also used to split emissions from the structural fire category. This table was chosen over the forest fire component split table because most of the material in a home is comprised of substances other than wood. Also, the same split was used for structural fires in Emission Inventories for Urban Airshed Model Application in Tulsa, Oklahoma (Reference 4).

Pollutant splits for architectural surface coating and automobile refinishing are identical as suggested in the Technical Discussion of Per Capita Emission Factors for Several Area Sources of Volatile Organic Compounds (Reference 9). Speciation data were supplied by SRAB in the Carbon-Bond format previously discussed.

Industrial surface coating emissions were split by KVB Table 402009A for general solvent surface coating as SRAB suggested.

The pollutant profiles for Cold Cleaning Degreasing and Commercial/Consumer Solvent Use emissions were supplied by SRAB in the carbon-bond format.

Vapor degreasing emissions were classified using Table 2-2 of the QAQPS Guidelines on Control of Volatile Organic Emissions From Solvent Metal Cleaning (Reference 10). This table lists national vapor degreasing solvent consumption by type. All vapor degreasing solvents are classified as non-reactive except trichoroethylene which is classified as ethylene. The file input is in the carbon-bond format.

The pollutant profile for graphic arts emissions is a composite of species data for four types of printing operations. KVB tables 405002A for letterpress, 405003A for flexographic, 405004A for lithographic, and 405005D for gravure printing were weighted 18, 13, 28 and 41%. These percentages are the relative contribution of each operation to national graphic arts emissions reported in Graphic Arts: An AP-42 Update (Reference 11).

Industrial surface coating speciation factors were applied to small industrial process emissions as SRAB suggested.

Emissions from dry cleaning were split using KVB Tables 401001B (Stoddard Solvent) and 401001C (perchloroethylene). Stoddard Solvent is classified as a paraffin and perchloroethylene as unreactive. The weight percent contribution of perchloroethylene was adjusted by the halogenated hydrocarbon procedure previously outlined.

SRAB developed a pollutant profile for evaporative gasoline emission sources using the Northeast Corridor Regional Modeling Project - Determination of Organic Species Profiles for Gasoline Liquids and Vapors (Reference 12). This document reports the analysis of the saturated vapor at 80°F of several gasoline samples taken in Philadelphia. The factors supplied by SRAB are in the carbon-bond format.

For the automotive category, a weighted average of evaporative and exhaust emissions was calculated. The particular ratios, which varied by inventory year, were found from Philadelphia AQCR Mobile Source Emissions Inventory (Reference 7). These splits are shown in Table 4.6.

Mobile source speciation factors supplied by SRAB were developed by adjusting KVB data for Philadelphia-specific fuel.

Pollutant splits supplied by SRAB were previously listed in Table 4.5.

TABLE 4.6

EXHAUST/EVAPORATIVE SPLITS FOR THE PHILADELPHIA AQCR[a]

Year	Exhaust Fraction	Evaporative Fraction
1979	0.691	0.309
1987	0.847	0.153

[a] Data Source: Reference 7.

For rail locomotive (diesel) exhaust, RAPS Table A-22, "Diesel Engine Exhaust", was chosen. This same table was used to speciate emissions from locomotives in the aforementioned Tulsa emissions inventory.

The VOC component splits for aircraft emissions were found using two sources. Since RAPS Table A-14, "Airports", contains component breakdowns for general emissions at airports, Organic Compounds in Turbine Combustor Exhaust (Reference 5) was also utilized to reflect the significant contribution of jet emissions in this category. The arithmetic average of the weight percents found in the two sources was used for each listed component. Category average molecular weights were found using individual compound molecular weights calculated from the compound lists in both references.

Natural gas leak emissions were split according to a chromatographic analysis provided by the Philadelphia Electric Company. Ninety-seven percent by weight was determined to be methane.

With respect to gasoline combustion, KVB Table 6-06-021D was chosen for all off-highway sources.

Component splits for other area source categories corresponded more directly to KVB component factor tables. These are listed in Table 4.7.

Oxides of Nitrogen

For all fuel use categories, Review of NO_x Emission Factors for Stationary Combustion Sources and AP-42 Update (Reference 8) was used for determining NO/NO_2 splits. The range of splits varied from 75%/25% for residential heaters using distillate oil to 99%/1% for commercial sized boilers burning residual or distillate fuel. For other categories, the same general procedure was followed as that used in the Tulsa study (Reference 4). The higher ratios were reserved for those categories that involve combustion of a more efficient nature. An example of this is the aircraft category (97%/3%). Aircraft engines are larger and burn hotter than most other types of combustion sources. Those categories with lower ratios (85%/15%) were high excess-air combustion processes that occur in the open, such as forest fires and structural fires. Individuals at several U.S. EPA offices were consulted during the aforementioned Tulsa study to obtain the NO_x splits upon which part of this section is based. These offices include the Research and Development Department of the Industrial Engineering Research Lab, the Air Management Technology Branch, and the Environmental Research Lab. A complete list of all NO_x splits for area sources is presented in Appendix D.

A mid-range NO/NO_2 split, 90/10, was used for highway vehicles at the suggestion of the above references.

POINT SOURCE COMPONENT SPLITS

This section discusses point source component splits for VOC and NO_x.

TABLE 4.7

MISCELLANEOUS AREA SOURCE COMPONENT SPLITS

SCC	Description	Source	Table Number
90100330 90200330 90300330	Distillate Oil Combustion	KVB	1-01-005
90100440 90200440 90300440	Residual Oil Combustion	KVB	1-01-004
90100500 90200500 90300500	Natural Gas Combustion	KVB	1-01-006
90700700	Diesel Farm Equipment	KVB	6-07-021
90700800	Diesel Construction Equipment	KVB	6-07-021
90904230	Diesel-Powered Vessels	KVB	6-07-021
90900440	Residual Oil Vessels	KVB	1-01-004
91000600	Cutback Asphalt	KVB	3-06-008F
91308200	Agricultural/Misc. Burning	KVB	5-01-002
91308500	Prescribed Burning	KVB	5-01-002

Volatile Organic Compounds

The first step in VOC/NO_x profile development was to identify the processes that emit VOC or NO_x. This required generating summary reports from the point source masterfiles. The resulting process description reports were analyzed to acquire more information about each source. The information available included SIC code, company name, operating rate, design rate, estimated emissions in tons per year for VOC and NO_x, and comments. From these data, it was determined not only which SCCs were applicable to which KVB tables, but also how important the source was in contributing VOC or NO_x emissions.

Those SCCs which were readily identifiable as pertaining to a specific KVB table are shown in Table 4.8. Also shown is the data confidence level (DCL) for each KVB table associated with the particular SCC. The DCL indicates the accuracy of the component split.

Table 4.9 lists all SCCs that exhibited VOC emissions, including those found in Table 4.8. A component split from RAPS or KVB was selected for each SCC, based on the nature of the process as found from process description reports. Those sources that contributed 40 tons per year or greater have been marked by an asterisk in Table 4.9.

For those point source categories involving gasoline evaporation, the same component split was used as that discussed in the area source section.

For all those SCCs beginning with the digits 304 (secondary metals), the VOC contributions were generally very small. RAPS Table A-19, "Stationary Industrial", was chosen for these splits. RAPS Table A-1, "Fuel Combustion", was selected for all anthracite and bituminous coal use, since a more specific split was not available in KVB.

Oxides of Nitrogen

For point sources, the component splits for NO_x vary from 98%/2% NO/NO_2 for processes with efficient combustion (low excess air) to 85%/15% for less efficient combustion processes. Examples of the former include SCCs 10100401 and 10100501, which are large oil-fired external combustion boilers used by utility companies. Sources emitting 15% NO_2 are exemplified by several processes in the refining industry. These processes include natural gas process heaters (30600201) and thermal catalytic cracking (30600301).

Since no information was available on NO and NO_2 emissions from any of the plants in the inventory area and very little literature dealing with the subject is available, the basic source of the data was consultation with experts associated with this field. The basic contacts are the same as those mentioned in the area source section of this chapter. These data sources were used in developing NO_x profiles for the Tulsa study (Reference 4).

Duct versus stack NO/NO_2 ratios vary due to cooling effects within the ductwork and the stack. However, the sources of information used in

TABLE 4.8

KVB COMPONENT SPLITS USED IN THE PHILADELPHIA INVENTORY

Process Description	SCC[a]	DCL[b]
External Combustion Boilers	10100401	2
	10200702	3
Internal Combustion Engines	20100201	3
	20200201	3
Chemical Manufacturing	30101501	4
	30101801	3
	30101903	3
	30102099	4
	30102620	3
	30199999	4
Primary Metals Manufacturing	30300302	3
	30300303	3
Mineral Products Manufacturing	30500102	4
	30500104	4
	30500199	3
	30500201	4
Petroleum Industry	30600201	3
	30600501	3
	30600701	3
	30600801	3
	30600802	3
	30600803	3
	30600804	4
Textile Manufacturing	33000199	4
Cleaning Solvent Evaporation	40100101	2
	40100102	3
	40100202	2
	40100203	2
	40100204	2
	40100205	2
	40100299	2
Surface Coating Evaporation	40200101	3
	40200102	2
	40200301	4

TABLE 4.8--Continued

Process Description	SCC	DCL
Surface Coating Evaporation (Cont.)	40200401	4
	40200499	4
	40200501	4
	40200601	4
	40200701	4
	40200801	3
	40200803	3
	40200899	2
	40200901	3
Petroleum Product Storage	40300101	3
	40300102	3
	40300103	3
	40300104	3
	40300201	3
	40300202	3
	40300203	3
	40300212	2
Dryers	40500499	4
	40500501	3
	40500599	

DCL	Definition
2 - Above Average	Data reasonably representative of the entire population.
3 - Average	Reasonable data more or less representative of the entire population.
4 - Below Average	Based on little data; not sufficient to be totally representative of the population.

[a] Source classification code.
[b] Data confidence level.

TABLE 4.9

MAJOR POINT SOURCE SCCs USED IN VOC SPLITS

Data Source	Table Title	SCC
KVB 1 01 004	External Combustion Boiler - Residual Oil	10100401*
		10100402*
		10100404*
		10200401*
		10200402*
		10200403*
		10201302
		10300401*
		10300402*
		10300403*
		30600101*
		30600103*
		30600401
		39000599*
KVB 1 01 005	External Combustion Boiler - Distillate Oil	10100501
		10200501*
		10200502*
		10200503*
		10200504
		10300502
		10300503*
		10500105
		10500501*
KVB 1 01 006	External Combustion Boiler - Natural Gas	10200601
		10200602*
		10200603
		10300602
		30200754
		39000699*
KVB 1 01 007	External Combustion Boiler - Refinery Gas	10200702
		10200704
		10200799
		10299998
KVB 1 02 008	External Combustion Boiler - Coke Oven Gas	10100801*
		10200707
		10200708*
KVB 2 01 002	Internal Combustion Engine - Natural Gas Turbine	20100201
		20200201
		20400499

TABLE 4.9--Continued

Data Source	Table Title	SCC
KVB 2 02 001	Internal Combustion Engine - Distillate Oil	20100101* 20100501 20200101*
KVB 3 01 015	Varnish Manufacturing	30101501 30101599
KVB 3 01 018A	Plastics, PVC, Manufacturing	30101800* 30101801* 30101822* 49000105*
KVB 3 01 018B	Plastics, Polypropylene Manufacturing	30101802 30101805 30101891 30101899* 30109101 32099999* 33000299
KVB 3 01 019B	Phthalic Anhydride Manufacturing	30101903
KVB 3 01 020	Printing Ink Cooking	30102099 30102404* 30102499
KVB 3 01 026A	Automotive Tire Manufacturing	30102620
KVB 3 01 026C	Synthetic Rubber Manufacturing	30102699* 30111102* 30111103 30800107* 30800197* 30800198* 30800199* 30800699
KVB 3 01 125	Ethylene Dichloride Manufacturing	30100701* 30100901* 30125899
KVB 3 01 999	Other Manufacturing	19999999* 30100799* 30101301* 30101401* 30101499* 30103599

TABLE 4.9--Continued

Data Source	Table Title	SCC
KVB 3 01 999 (Cont'd)		30105001
		30106099
		30109099
		30125099
		30190099*
		30199999*
KVB 3 03 003	Primary Metals - Metallurgical Coke Manufacturing	30300302*
		30300303*
		30300306
		30300308*
KVB 3 03 008A	Primary Metals - Iron Production	30300599
		30300807
		30300813*
		30300899
		30900199
KVB 3 03 009A	Primary Metals - Steel Production	30300901
KVB 3 05 001B	Mineral Products - Asphalt Roofing, Dipping	30500102
		30500104
KVB 3 05 001D	Mineral Products - Asphalt Roofing, Tar Kettle	30500199
		30500599*
		30501204*
		30501205
		30501299*
KVB 3 05 002A	Mineral Products - Asphalt Concrete, Dryer	30500201
		30500305
		30500399
		30501401*
		30501402
		30501414
		30501499
		30501503
		30501604
		30501699
		30504033
		30600102*
		30600104*
		30600105
KVB 3 06 002	Petroleum Industry - Boiler	30600201*
		30600301*

TABLE 4.9--Continued

Data Source	Table Title	SCC
KVB 3 06 005	Petroleum Industry - Fugitive Emissions, Drainage Pits	30600501 30600503 30600504* 30600602* 30600603* 30600805*
KVB 3 06 007	Petroleum Industry - Cooling Towers	30600701* 30600702*
KVB 3 06 008A	Petroleum Industry - Miscellaneous	30600801* 30600806 30600807
KVB 3 06 008F	Petroleum Industry, Miscellaneous, Distillate	40301019 40301020 40301199* 40301299 40600135
KVB 3 06 008N	Petroleum Industry - Fugitive Emissions, Marketing	30600802*
KVB 3 06 008P	Petroleum Industry - Miscellaneous, Pump Seals	30600803*
KVB 3 06 008Z	Petroleum Industry - Miscellaneous, Compressor Seals	30600804
KVB 3 06 009	Petroleum Industry - Natural Gas Flares	30600999*
KVB 3 06 013	Petroleum Industry - Catalytic Reformer	30600402* 30600502* 30601101* 30601201 30601613 30699998*
KVB 3 30 001	Textile Manufacturing - Fabric Dyeing	32099199 33000199 33000203*
KVB 4 01 001A	Evaporation, Cleaning Solvent - Dry Cleaning, Trichloroethane	40100202
KVB 4 01 001B	Evaporation, Cleaning Solvent - Dry Cleaning, Stoddard Solvent	40100102 40100105 40100201

TABLE 4.9--Continued

Data Source	Table Title	SCC
KVB 4 01 001C	Evaporation, Cleaning Solvent - Dry Cleaning, Perchloroethylene	40100101* 40100203*
KVB 4 01 002A	Evaporation, Cleaning Solvent - Degreasing, Trichchloroethane	39999999* 40100202* 40100299
KVB 4 01 002B	Evaporation, Cleaning Solvent - Degreasing, Dichloromethane	40100204
KVB 4 01 002C	Evaporation, Cleaning Solvent - Degreasing, Trichloroethylene	40100205*
KVB 4 01 002D	Evaporation, Cleaning Solvent - Degreasing, Toluene	40199999*
KVB 4 02 001A	Surface Coating - Paint, Hot Air Dried	40200101* 40200110*
KVB 4 02 001B	Surface Coating - Paint Solvent, Acetone	40200102 40200902*
KVB 4 02 001D	Surface Coating - Paint Solvent, Methyl Ethyl Ketone	40200503 40200918
KVB 4 02 003A	Surface Coating - Varnish, Shellac, General	30702099* 40200299 40200301 40200399 40200802* 40200922 40202103*
KVB 4 02 004A	Surface Coating - Lacquer, Paperboard Products	30111001* 40299999*
KVB 4 02 004B	Surface Coating - Lacquer, Metal Furniture	40200401*
KVB 4 02 004C	Surface Coating - Lacquer, Semigloss	40200499*
KVB 4 02 005A	Surface Coating - Enamel, General	40200501* 40200510 40200599*
KVB 4 02 006H	Surface Coating - Mineral Spirits	40200920

TABLE 4.9--Continued

Data Source	Table Title	SCC
KVB 4 02 006K	Surface Coating - Primer	40200699*
KVB 4 02 006E	Surface Coating - Primer, Auto	40200601*
KVB 4 02 007A	Surface Coating - Adhesives	40200199* 40200701* 40200706* 40200921* 49000199*
KVB 4 02 008A	Surface Coating - Coating Oven, Metal Parts	40200801*
KVB 4 02 008B	Surface Coating - Coating Oven, Auto Primer	40200803*
KVB 4 02 008E	Surface Coating - Coating Oven, Enamel	40200406* 40200898* 40200899*
KVB 4 02 009A	Surface Coating - Solvent, General	30700401 30700899 40200901* 40201726* 40201727* 40201799* 40201801* 40201806 40202301 40202306* 40202401 40202406 40202501*
KVB 4 02 009C	Surface Coating - Butyl Alcohol	40200904
KVB 4 02 009F	Surface Coating - Solvent, Ethyl Alcohol	40500304*
KVB 4 02 009K	Surface Coating - Solvent, Methyl Alcohol	40200917
KVB 4 03 001C	Petroleum Products Storage - Fixed Roof Crude Oil	40300102 40300151* 40301109* 40600253*
KVB 4 03 001D	Petroleum Products Storage - Fixed Roof Crude Oil	40300104* 40300106* 40300107*

TABLE 4.9--Continued

Data Source	Table Title	SCC
KVB 4 03 001E (Cont'd)		40300203* 40300204 40300206* 40300207* 40600127*
KVB 4 03 001E	Petroleum Products Storage - Fixed Roof Jet Fuel, Jet A	40300150* 40300152* 40300199* 40300205 40300299* 40399999* 40600105* 40600130* 40600140*
KVB 4 03 001F	Petroleum Products Storage - Fixed Roof, Benzene	30101199* 40300108 40300153 40300208*
KVB 4 03 001J	Petroleum Product Storage - Fixed Roof, Heptane	40300211
KVB 4 03 001K	Petroleum Products Storage - Hexane	40300212 40301099* 40302001*
KVB 4 03 001M	Petroleum Product Storage - Fixed Roof, Isopentane	40300312
KVB 4 03 001P	Petroleum Products Storage - Toluene	40300116 40300161* 40300216*
KVB 4 03 003	Petroleum Product Storage - Variable Vapor Space, Liquified Petroleum Gas	40300398 40300399*
KVB 4 05 002A	Printing Press - Inking and Drying	40201101* 40201301* 40500101* 40500201*
KVB 4 05 003A	Printing Press - Flexographic	30101812* 40500301 40500305*

TABLE 4.9--Continued

Data Source	Table Title	SCC
KVB 4 05 003A (Cont'd)		40500306* 40500311* 40500511*
KVB 4 05 004A	Printing Press - Lithography, Inking, and Drying	40500401* 40500499
KVB 4 05 005A	Printing Press - Gravure Printing, Paperboard	40500501
KVB 4 05 005B	Printing Press - Periodicals	40500598* 40500599
KVB 4 05 005D	Printing Press - General	40500506* 49099999*
KVB 4 06 002	Petroleum Product Storage - Fixed Roof, Marine Terminal	30699999*
KVB 5 01 005	Solid Waste Incinerator	50100506
SRAB (Adjusted to reflect composition of Philadelphia gasoline)	Petroleum Products Storage - Fixed Roof Gasoline (working & breathing)	40300101 40300103 40300201 40300202* 40300302* 40301102* 40301198* 40400101* 40400110 40400112 40400199* 40600101* 40600126* 40600131* 40600197* 40600198 40600240* 40600304 40600401
KVB 9 13 081	Misc. Burning - Forest Fires	30100699*
KVB 6 35 705	Petroleum Product Storage - Pesticides	30103399*

TABLE 4.9--Continued

Data Source	Table Title	SCC
RAPS A-1	Fuel Combustion	10100201*
		10100202*
		10200101
		10200104
		10200107
		10200201
		10200202*
		10300107
		10300109
		10300199
RAPS A-18	Waste Incineration	50100101*
		50100102*
		50200505
		50300101*
		50300103
		50300202
		50300506
		50300599
RAPS A-19	Stationary Industrial	30400101
		30400103
		30400199*
		30400201
		30400203
		30400205
		30400309
		30400399
		30400401
		30400499*
		30400899
		30499999
		30599999
		33000499
		39000499
		39000508
		39000531

* Denotes emissions of 40 TPY or greater.

obtaining the NO/NO_2 ratios were unable to distinguish between duct and stack conditions in almost all cases. Not until the data are used in modeling can the significance of the potential difference in NO/NO_2 ratios be ascertained.

CHAPTER 4

REFERENCES

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CHAPTER 5

TEMPORAL FACTOR FILES

INTRODUCTION

Annual emissions were separated into several temporal divisions. First, the year was divided into four quarters with June, July, and August representing the oxidant season. Also, a typical weekday during the oxidant season was expressed as a fraction of the entire season. Finally, hourly factors were computed for the typical oxidant season weekday. The data were recorded in Eastern Daylight Time (EDT) and expressed as percentages.

Point source temporal data were developed for specific emission points within plants that had VOC or NO_x emissions in excess of 5,000 tons per year based on information gathered during plant visits and conversations with plant personnel. The temporal factors generated for specific emission points were applied first. Then temporal factors relating to an SCC (primarily for storage tanks) were used. For emission points that had no temporal factors, operating data found in the masterfile were used to develop the required temporal profiles.

The temporal resolution of area source data was accomplished differently for each individual category. The preferred method of estimation was through direct contact with individuals who work in fields related to the specific categories. Lacking this, several literature sources were utilized. These include: RAPS Off-Highway Mobile Source Emission Inventory (Reference 1), Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds Volume II (Reference 2), and Residential and Commercial Area Source Emission Inventory Methodology for the Regional Air Pollution Study (Reference 3).

The complete temporal data file for area and point sources is shown in Appendix E. Area sources are referred to by their SCC. For point sources, temporal factors are provided first by plant and point identification and then by SCC. The general methodologies used and assumptions made in developing the temporal data file are addressed in the following sections.

POINT SOURCES

The plants contacted by ES (those with VOC or NO_x emissions in excess of 5,000 tons per year) were asked to provide very specific temporal data for each emission point with significant emissions. Seasonal data, particularly for the oxidant season (June, July, and August), were requested in the form of percent of annual throughput or utilization. For determining the emissions that would occur during a typical weekday in the oxidant season, plant representatives provided information in one of two ways. The most accurate method was supplying hourly operating data (as discussed below) for both a typical weekday and weekend day during the oxidant season. The alternate method was to give a ratio of the percent operation on a typical weekday to a weekend day. The hour-by-hour variation during the weekday was obtained from graphs showing hourly proportion of an operating parameter versus hour of the day. The most detailed temporal information was obtained from power plant personnel who provided for each unit graphs of electrical generation on an hour-by-hour basis for a typical weekday during the oxidant season. Each of the refinery representatives indicated there was no variation on an hour-by-hour or daily basis. Some seasonal variation did occur, however, because of scheduled maintenance procedures for various production units at the refinery. These variations were included in the temporal factor file.

A different procedure was used to develop temporal splits for storage tanks. Temporal information found in the masterfiles was based on product throughputs. To develop splits based on emissions, the API equations from AP-42 (Reference 4) for each type of tank and product stored were used. Average temperature and wind speed on an annual basis and for the month of July from the Philadelphia International Airport (Reference 5) were used in the appropriate API equation to develop a ratio of the emissions during the oxidant season as compared to the annualized emissions. A ratio was calculated for each storage tank SCC and entered into the temporal factor file. It was assumed that the product stored in each tank was as indicated in the masterfile and was stored year-round. Additionally, these ratios were developed for tanks with indicated 25% throughput per quarter. Those tanks with other than 25% throughput were treated separately. In the latter cases, a unique emissions ratio was calculated for each tank and included in the temporal factor file for the appropriate emission point.

Hourly emissions data for storage tanks were taken from a previous ES study (Reference 6). The data are for breathing losses from fixed-roof storage tanks not being worked. Emissions were shown to occur for eight consecutive hours after sunrise. Emissions increased to a maximum during the third hour, stayed fairly constant for the next two hours, and then decreased. Over two-thirds of the daily emissions occurred during the third, fourth, and fifth hours after sunrise. This hourly variation was applied to all storage tank emissions. Not all emissions from storage tanks, however, result from breathing losses. Working losses also occur due to movement of products into and out of tanks. Working losses are minimized when products are stored in tanks equipped with floating roofs. The breathing loss temporal pattern is therefore appropriate for emissions from floating roof tanks. Working losses from fixed roof tanks depend, among other variables, upon the amount of product throughput and as a result are related to the throughput rate. No information is available on hourly throughput rates. Even if this information was available, the point source masterfile only provides total emissions from each tank and no emission factors are included. Therefore, it is not possible with existing information to separate the working and breathing losses for each tank. For these reasons, the breathing loss temporal profile was used for all emissions from storage tanks.

For sources not contacted or not included in the storage tank category, the temporal factors used were those developed from operating data contained in the masterfile. These data were in the form of hours per day, days per week, and weeks per year. The following assumptions were made, based on temporal data commonly found in the point source masterfile:

- Eight hour days began at 7 a.m. and ended at 3 p.m. EST.
- Sixteen hour days began at 7 a.m. and ended at 11 p.m. EST.
- Six days per week operation excluded Sundays.
- A missing operating schedule defaulted to eight hours per day, five days per week, and 52 weeks per year.

Additional information concerning the computerized process used to generate temporal factors is included in Chapter 6.

AREA SOURCES

Area source temporal splits were performed on a category-by-category basis. Where no temporal variations could be developed from existing information, the following default values were utilized:

Seasonal Percentages	Daily Percentage	Hourly Percentage
25% spring	1.087	4.167
25% summer		
25% fall		
25% winter		

The seasonal percentages represent an even division of the annual emissions by the four seasons of the year. The daily temporal percentage represents an equal assignment to each of the 92 days in the oxidant season. The hourly percentage results from the equal distribution of the daily emissions into the 24 hours in a day.

The balance of this chapter discusses each of the area source categories, including those for which the default values were applied.

Anthracite Coal Use (90100111)(90200111)

Anthracite coal is used primarily for space heating. Accordingly, the seasonal usage profile was developed from 1979 meteorological heating degree-day information. By finding the percentage of the total heating degree-days in a given season, a 56-25-1-18 split for winter-spring-summer-fall was developed. The hourly profile for natural gas usage was applied to the residential category. No distinctions were made between weekdays and weekend days. The hourly pattern for the commercial category was developed by dividing 50% of the daily usage equally between the working hours of 7 a.m. - 4 p.m. EST. This assumption is based on the greater need for space heating during business hours. A slight weekday vs. weekend day preference was included by assuming an operating week of 5.5 days. This figure assumes that half of the commercial establishments are open five days a week and the other half are open six.

Natural Gas Use (90100500)(90200500)(90300500)

This category was divided into three subcategories: residential, commercial, and industrial gas use. From figures found in Residential and Commercial Area Source Emission Inventory Methodology for the RAPS (Reference 3), the hourly oxidant-season natural gas flows for the LaClede, St. Louis, gas system were obtained. The assumption made in that and the present study was that hourly flows are the same for both the residential and the commercial categories. To simulate the oxidant season, the graph for gas flows at a temperature greater than 68°F was used. Industrial gas diurnal variations indicate that 44% of the daily use occurs during the peak business hours (7 a.m. to 3 p.m. EST).

No weekday-weekend day variations were accounted for in the residential category. The industrial subcategory was based on a six-day workweek, while commercial emissions were based on a 5.5 day workweek for the same reason given in the anthracite coal use category.

Natural gas seasonal splits by category were acquired directly from the Public Service Gas and Electric Company in New Jersey and the Philadelphia Electric Company. Since the seasonal splits provided by the two companies were nearly identical, a single split was placed in the temporal file for each category of user.

Residential Wood Burning (90100600)

In this category, the least significant of the fuel use categories, no oxidant-season emissions were assigned. One hundred percent of the emissions were assumed to occur in the period October through April, resulting in a 60-20-0-20 seasonal split by quarters. Hourly wood burning was assigned to the typical waking hours (5 a.m. through 11 p.m. EST).

Residual Oil Use (90200440)(90300440)

This category was divided into subcategories of commercial and industrial uses. Seasonal variations for commercial residual oil use were based on degree-day information. Industrial residual oil use differed from commercial in that a six-day instead of a 5.5 day operating week was used. The six-day figure assumes that while many industrial processes require continuous fuel use, other industrial processes cut back significantly on the weekend and that the average industrial use is, therefore, six days per week. Also, 50 percent of the industrial use was allocated to the business hours of 7 a.m. to 4 p.m. EST to reflect greater production during business hours.

Distillate Oil Use (90100330)(90200330)(90300330)

The seasonal cycle for distillate oil use in the residential subcategory was based on heating degree-days, just as for anthracite coal use. Except for commercial natural gas use and residential wood burning, daily and hourly percentages for fuel use within a specific subcategory (e.g., residential) were the same for all fuel sources within that subcategory. Therefore, the daily and hourly splits for distillate oil consumption were the same as those mentioned above for anthracite coal use. Likewise, the temporal split for industrial distillate oil use was the same as that for industrial residual oil use.

Bituminous Coal Use (90200222)(90300222)

As shown in Appendix A, over 96 percent of the bituminous coal use was industrial in nature, with the remainder being commercially used in the area source inventory for Montgomery County, Pennsylvania. The industrial operating schedule of 6.0 days per week for bituminous coal was the same as that for residual and distillate oil. Commercial bituminous temporal use was 5.5 days for the same reason given for commercial anthracite use. Seasonal and hourly splits were the same as those for the other fuel types.

On-Site Incineration (90401300)

Only New Jersey commercial incinerators were included in the area source portion of the inventory, since incineration in other portions of the study area were included in the point source inventories. No seasonal variations were assumed. Nearly all of the emissions were allocated between the hours of 7 a.m. - 5 p.m. EST. The allocation assumes that nearly all on-site incineration is accomplished during business hours. A 5.5 day operating week was assumed, based on typical incineration schedules.

Agricultural Equipment (90600700)(90700700)

Temporal variations for this category follow the guidelines suggested in RAPS Off-Highway Mobile Source Emission Inventory (Reference 1). Farm equipment was assumed to be in use from March through October. Twenty percent of the emissions were allotted to the oxidant season, with 35 percent and 45 percent allocated to the adjacent spring months and autumn months, respectively. These figures reflect springtime planting and autumn harvesting. Emissions were assigned to the hours of 5 a.m. to 9 p.m. EST, with a six-day workweek also assumed.

Construction Equipment (90600800)(90700800)

The hourly and daily factors were obtained from the second edition of the Procedures document (Reference 2). These profiles indicate a 5.5 day operating week, with 12-hour long weekday operations beginning at 6 a.m. EST. Because of weather considerations, zero construction activity was assumed during the winter. The seasonal distribution was divided evenly between the other three quarters.

Industrial Equipment (9100240, 91308300)

Hourly factors for industrial equipment supplied by SRAB divide 80% of the daily emissions equally between 6 a.m. and 3 p.m. EST and the remaining 20% equally between 3 p.m. and 10 p.m. EST. Oxidant season emissions are 30% of the annual, and operations are 6 days per week from the industrial equipment category in Procedures Volume II (Reference 2).

Small Gasoline Engines (90600900)

According to AP-42, lawn and garden use comprises eighty-nine percent of this category. The temporal splits were therefore taken from the lawn and garden temporal apportionment sections of Reference 1 and Reference 2. Accordingly, sixty-five percent of the emissions were allotted to the oxidant season. A uniform hourly split began at 8 a.m. and ended at 6 p.m. EST with 50 percent of all emissions occurring on weekend days.

Railroads (90702400)

The majority of emissions in this category are due to freight service rather than passenger service. Therefore, a sales manager at Conrail was contacted who supplied the temporal data necessary for this category. Thirty-six percent of the traffic occurred uniformly between 5 p.m. and 11 p.m. EST, and the remaining 64% was equally distributed around the clock. Midday local traffic involved the movement of boxcars for loading and unloading. No seasonal variations were assumed. The Conrail sales manager indicated there was only a slight weekday-weekend day preference, so an operating schedule based on a 6.3 day workweek was assumed.

Aircraft (90803100)(90803200)(90803300)

Data were collected for this category through telephone conversations with officials at Philadelphia International Airport and other local airports. Generally, commercial traffic was reported to be greater during the daylight hours, especially late afternoon and early evening. Hourly variations were the most dramatic for the civil aircraft category (92% between 9 a.m. and 9 p.m. EST). Least affected was the military category (55% between 9 a.m. and 9 p.m. EST). No seasonal variations were assumed. Also, no weekday-weekend day variations were expected for military or commercial aircraft. However, due to the nature of civil aircraft flights, this category was highly biased toward the weekend days. Fifty percent of the weekly emissions were allocated to Saturday and Sunday.

Vessels (90904230)(90900440)(90904430)

This category is divided into three subcategories based on fuel type. Diesel- and residual-fuel powered vessels include large river and ocean-going barges for which no temporal variation can be assumed. The gasoline-powered vessels are predominantly for recreational use. Seasonal splits for this subcategory were, therefore, divided into 25 percent each for the spring and fall quarters and 50 percent for the summer season. As suggested in Reference 2, 75% of the emissions for recreational vessels was assumed to occur uniformly between 5 a.m. and 5 p.m EST with fifty percent of weekly emissions occurring on Saturday and Sunday.

Architectural Surface Coating (90401200)

Hourly and daily factors for architectural surface coating reflect data for the non-industrial surface coating category in Procedures Vol. II. The file indicates uniform activity from 6 a.m. to 6 p.m. EST seven days per week. Oxidant season emissions, based on information supplied by U.S. EPA SRAB, are 38% of annual emissions.

Automobile Refinishing (90401300)

Temporal factors for automobile refinishing supplied by SRAB indicate uniform activity from 7 a.m. to 4 p.m. EST, five days per week, and 25% per quarter.

Industrial Surface Coating (90501100)

Hourly factors for industrial surface coating equal those supplied by SRAB for industrial equipment (80% 6 a.m. to 3 p.m. EST, 20% 3 p.m. to 10 p.m. EST). Oxidant season emissions are 30% of the annual and operations are 6 days per week from the industrial equipment category in Procedures Volume II.

Cold Cleaning Degreasing (90501200)
Open Top Vapor and Conveyorized Degreasing (90501300)

Hourly factors for both cold cleaning and vapor degreasing equal those supplied by SRAB for Industrial Surface Coating (80% 6 a.m. to 3 p.m., 20% 3 p.m. to 10 p.m. EST). Factors for the degreasing category in Procedures, Vol. II indicate seasonal activity of 25% per quarter and 6 day per week operations.

Commercial/Consumer Solvent Use (91002100)

Temporal factors for commercial/consumer solvent use are from the miscellaneous solvent use category in Procedures Vol. II. Eighty percent of the daily emissions are divided equally between 6 a.m. to 6 p.m. EST. The remaining 20% are similarly divided between 6 p.m. to 11 p.m. EST. Emissions occur seven days per week and 25% per quarter.

Graphic Arts (91002200)

Hourly factors for graphic arts emissions supplied by SRAB indicate uniform activity between 6 a.m. to 4 p.m. EST. Because area source graphic arts facilities are commercial establishments, seasonal and daily factors for another commercial operation, dry cleaning, were used. These factors divide emissions 25% per quarter, six days per week.

Small Industrial Processes (91002300)

As SRAB suggested, temporal factors for small industrial process emissions equal those for industrial surface coating and industrial equipment, i.e., 80% 6 a.m. to 3 p.m. EST, 20% 3 p.m. to 10 p.m. EST; 30% oxidant season, 6 days per week.

Gasoline Marketing (91005100, 91005200, 91002600)

Residential and Commercial Area Source Emission Inventory Methodology for the RAPS (Reference 3) contains information concerning gasoline sales in the St. Louis, Missouri, area. Table 3.2, "Temporal Allocation Factors for the Filling of Automobile Gasoline Tanks", was used to determine hourly variations. Figure 3.2, "State of Missouri Gasoline Sales", was used for seasonal variations. For weekday-weekend day splits, no temporal variations were given in any of the literature, and therefore the default value was used. Although no splits specific to the Philadelphia area were available, the St. Louis figures are similar to those documented in Procedures (Reference 2), and therefore they were used for Philadelphia.

This profile is being applied to State I and Other as well as Stage II gasoline marketing because emissions from loading or spillage can occur anytime the stations are open for business.

Cutback Asphalt (91000600)

Cutback asphalt temporal factors from Procedures Vol. II (Reference 2) were used. These factors divide emissions equally spring through autumn, 6 a.m. to 6 p.m. EST, Monday through Friday.

Dry Cleaning (91000800)

Dry cleaning temporal factors are from Procedures Vol. II (Reference 2). Emissions are divided equally throughout the year, six days per week, from 6 a.m. to 6 p.m., EST.

Pesticide Use (91000900)

Pesticide application was assumed to occur uniformly during the daylight hours with no weekday-weekend day variations. Since pesticide application is seasonal in nature, all emissions were allocated to the spring (30%) and summer months (70%). These assumptions agree with information obtained from the New Jersey Department of Health, the Chester County agricultural extension agent, and other local officials.

Agricultural Burning (91308200)

As for the pesticide use category, the principal source of data for agricultural burning was local agricultural officials. The only temporal variations used were hourly. Emissions were assigned uniformly to the daylight hours of 5 a.m. to 9 p.m. EST only.

Prescribed Burning (91308500)

State forestry departments indicated that there is no prescribed burning during the oxidant season. Sixty to eighty percent occurs during the spring, twenty percent during the fall, and the remainder during the winter. Emissions occur uniformly from 9 a.m. to 5 p.m. EST five days per week.

Natural Gas Leaks, Forest Fires, and Structural Fires (91000700), (91308100), (91308400)

Due to the nature of these categories, no temporal variations could be assumed. The uniform percentages listed at the beginning of this section were utilized for these categories.

CHAPTER 5

REFERENCES

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CHAPTER 6

PREPARATION OF EMISSIONS PACKETS FOR THE AIRSHED MODEL

Emissions input for the Airshed Model is composed of four different sets of information called packets. The types of data included in each packet are as follows:

Packet	Data Type
GRID VALUES	Three separate sets of gridded emissions for minor point, area, and highway vehicle sources for each hour for 24 hours.
EMISSIONS VALUES	Emissions for major (elevated) point sources for each hour for 24 hours.
POINT SOURCES	Stack data for major (elevated) point sources, time invariant.
TIME INTERVAL	Beginning and end date and time for each hour for 24 hours.

The specific data formats for these packets are shown in Tables 6.1 through 6.5. Each EMISSIONS VALUES or GRID VALUES packet must be placed within a TIME INTERVAL packet to associate the emission rate provided with a specific hour of the day (e.g., 12 midnight to 1 a.m.).

The procedure for preparing packet files for the Airshed Model consisted of these sequential steps: obtaining appropriate emissions disaggregation factors, calculating hourly emissions for all emission components, and placing information in the required packet format for use by the Airshed Model. Schematic representations of the data processing system are shown in Figures 6.1 through 6.5. Components of the data processing system used to produce the packets are:

- o VOC and NO_x speciation factor tables.
- o Temporal distribution factor tables for seasonal, weekday, and hourly periods.
- o EIS/P&R point and area source files and associated data handling routines.

TABLE 6.1

GRID VALUES PACKET FORMAT

Card Number/ Name	Item/Columns	Comments
1/Packet Header	Header/1-10	GRID VALUES, left adjusted
2+/Grid Emissions	Subregion Name/1-10	PHILA
	Pollutant Name/11-20	See Table 6.3 for names
	Column No./21-30	X-index of grid, counting from bottom (South) column = 1
	Row No./31-40	Y-index of grid, counting from left (West) row = 1
	Emission Value/41-50	Units are gram-moles/hr except grams/hr for AEROSOLS and RAPS categories
3/Packet Terminator	Terminator/1-3	END, left adjusted

TABLE 6.2

EMISSIONS VALUES PACKET FORMAT

Card Number/ Name	Item/Columns	Comments
1/Packet Header	Header/1-10	EMISSIONS VALUES, left adjusted
2+/Point Source Emissions	Point Source ID/1-10	EIS/P&R county, plant, and point ID number
	Pollutant Name/11-20	See Table 6.3 for names
	Emission Value/21-30	Same units as GRID VALUES
3/Packet Terminator	Terminator/1-3	END, left adjusted

TABLE 6.3

FIELDS COMMON TO GRID AND EMISSIONS VALUES PACKETS

Card Number/ Name	Column	Description	Value
2+/Grid or Point Source Emissions	69	Source Type	Major or Minor Point - P
			Area - A
			Line - L
	70 and 71	Year	Last two digits of year
	72	Projection Type	Base Year - B
			Baseline Projection Year (growth) - G
			Strategy - S
	73	Projection Number	0
	74		Blank
	75	Weekday Code	1
	76 and 77	Hour Number	Midnight to 0100 - 01
			0100 to 0200 - 02
			2300 to 2400 - 24
	78		Blank
	79 and 80	Pollutant ID	CO - 01
			SO_2 - 02
			AEROSOLS - 03
			NO - 04
			NO_2 - 05
			PAR - 06
			OLE - 07
			CARB - 08
			ARO - 09
			RAPSPARA - 10
			RAPSOLEF - 11
			RAPSALDE - 12
			RAPSAROM - 13
			ETH - 14

TABLE 6.4

POINT SOURCES PACKET FORMAT

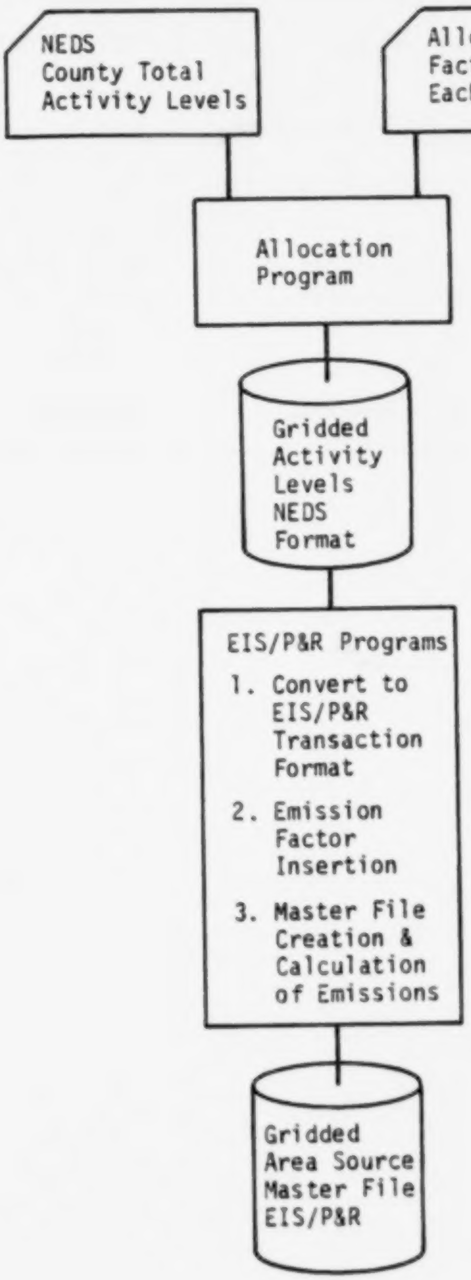
Card Number/ Name	Item/Columns	Comments
1/Packet Header	Header/1-10	POINT SOURCES, left adjusted
2+/Point Source ID and Location	Point Source ID/1-10	Same as EMISSIONS VALUES
	Source Type/11-20	PLUMERISE if stack data are complete; STACKHGT if data are missing
	X-location/21-30	X-coordinate with respect to reference origin (meters)
	Y-location/31-40	Y-coordinate with respect to reference origin (meters)
3+/Stack Properties	Stack Height/1-10	Ground to top of stack (meters)
	Stack Exit Diameter/ 11-20	For flow rate calculation (meters)
	Stack Exit Temperature/21-30	For heat flux calculation (°K)
	Stack Exit Velocity/ 31-40	For flow rate calculation (meters/second)
4/Packet Terminator	Terminator/1-3	END, left adjusted

TABLE 6.5

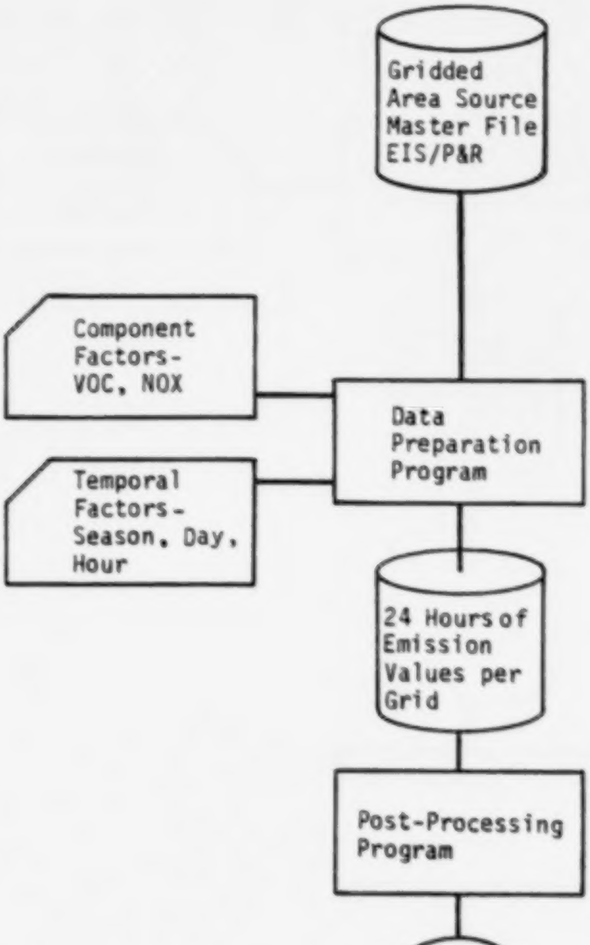
TIME INTERVAL PACKET FORMAT

Card Number/ Name	Item/Columns	Comments
1/Packet Header	Header/1-10	TIME INTERVAL, left adjusted
2/Time Interval	Beginning Date/1-10	yy001 - yy is last two digits of year
	Beginning Time/11-20	hh00 - hh is begin time for hour - starts at 00 and ends at 23
	End Date/21-30	Same as Beginning Date
	End Time/31-40	hh00 - hh is end time for hour - starts at 01 and ends at 24
3/Packet Terminator	Terminator/1-6	END TIME, left adjusted

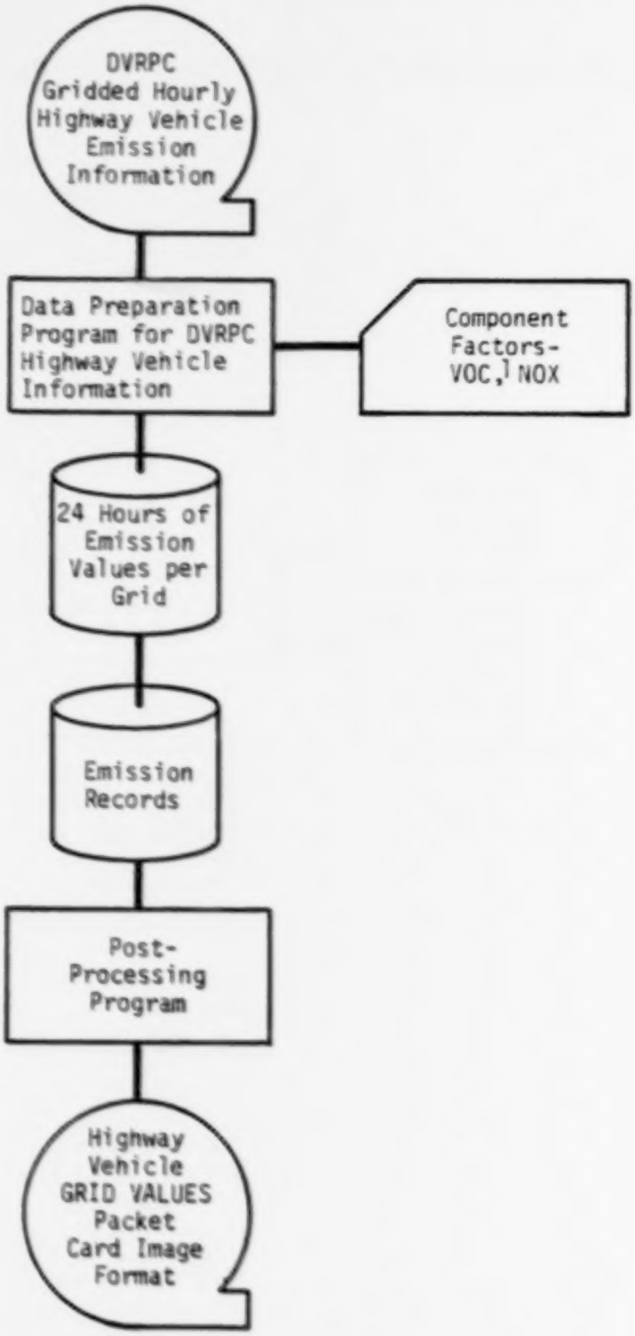
PREPARATION OF GRIDDED AREA SOURCE MASTER FILE


NEDS
County Total
Activity Levels
Allocation
Factors for
Each Grid
Allocation
Program
Gridded
Activity
Levels
NEDS
Format
EIS/P&R Programs
1. Convert to
EIS/P&R
Transaction
Format
2. Emission
Factor
Insertion
3. Master File
Creation &
Calculation
of Emissions
Gridded
Area Source
Master File
EIS/P&R

PREPARATION OF AIRSHED MODEL DATA PACKET FOR AREA SOURCES


Gridded
Area Source
Master File
EIS/P&R
Component
Factors-
VOC, NOX
Data
Preparation
Program
Temporal
Factors-
Season, Day,
Hour
24 Hours of
Emission
Values per
Grid
Post-Processing
Program
Area Source
GRID VALUES
Packet
Card Image
Format

PREPARATION OF AIRSHED MODEL DATA PACKET FOR HIGHWAY VEHICLES


DVRPC Gridded Hourly Highway Vehicle Emission Information
Data Preparation Program for DVRPC Highway Vehicle Information
Component Factors- VOC,[1] NOX
24 Hours of Emission Values per Grid
Emission Records
Post-Processing Program
Highway Vehicle GRID VALUES Packet Card Image Format

[1] Separate profiles were input for exhaust & evaporative VOC.

FIGURE 6.4

PREPARATION OF AIRSHED MODEL DATA PACKET FOR MAJOR POINT SOURCES

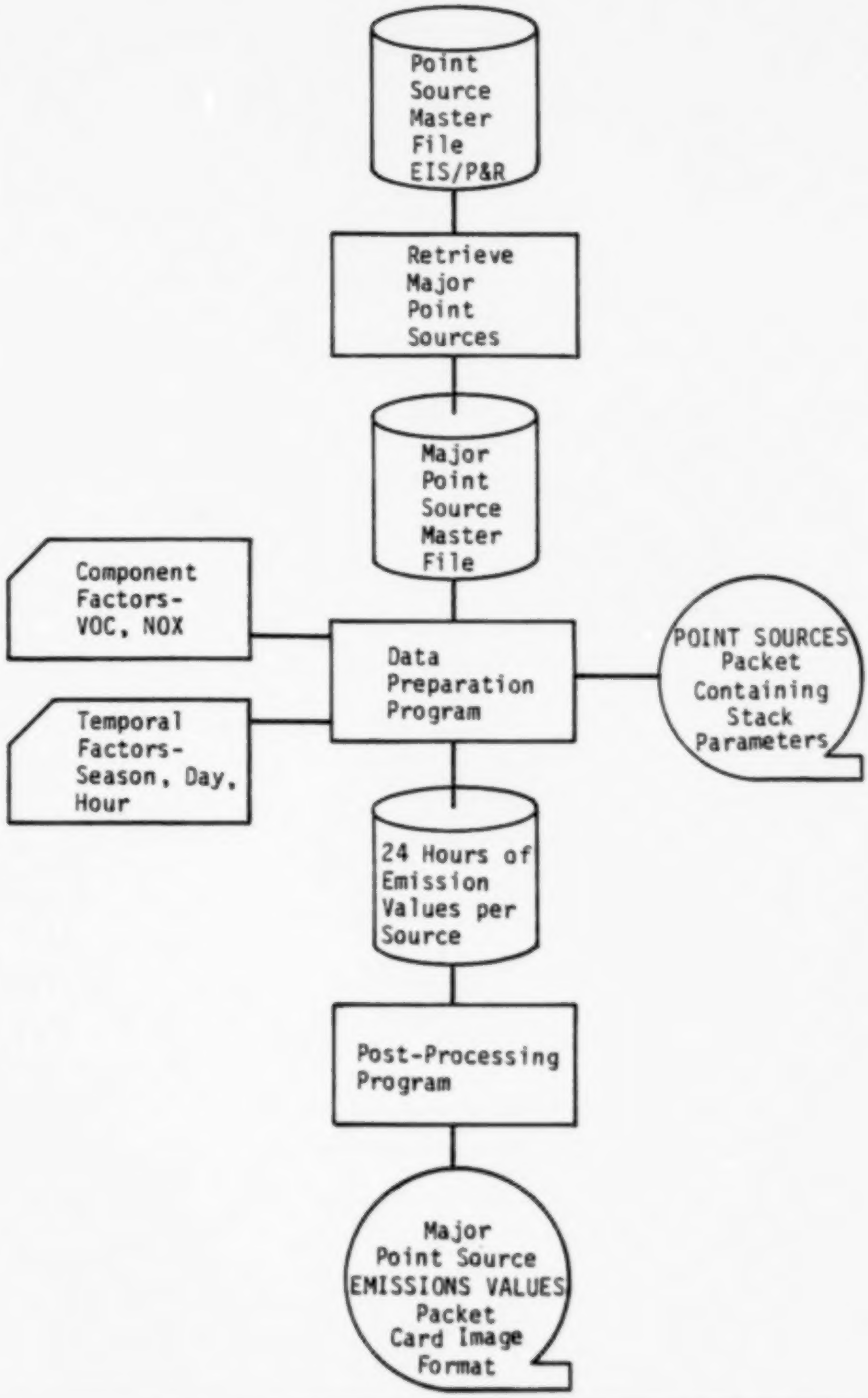
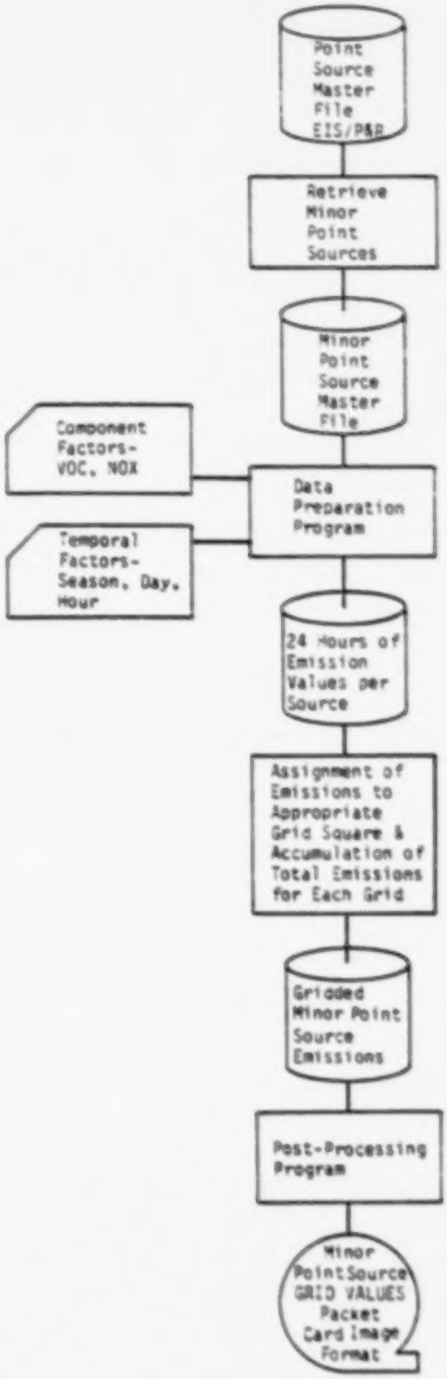

Point Source Master File EIS/P&R
Retrieve Major Point Sources
Major Point Source Master File
Component Factors- VOC, NOX
Temporal Factors- Season, Day, Hour
Data Preparation Program
POINT SOURCES Packet Containing Stack Parameters
24 Hours of Emission Values per Source
Post-Processing Program
Major Point Source EMISSIONS VALUES Packet Card Image Format

FIGURE 6.5

PREPARATION OF AIRSHED MODEL DATA PACKET FOR MINOR POINT SOURCES


Point Source Master File EIS/P&R
Retrieve Minor Point Sources
Minor Point Source Master File
Component Factors- VOC, NOX
Data Preparation Program
Temporal Factors- Season, Day, Hour
24 Hours of Emission Values per Source
Assignment of Emissions to Appropriate Grid Square & Accumulation of Total Emissions for Each Grid
Gridded Minor Point Source Emissions
Post-Processing Program
Minor PointSource GRID VALUES Packet Card Image Format

- DVRPC gridded, hourly highway vehicle inventory of particulates, SO_2, CO, NO_x, and exhaust and evaporative VOC for the Philadelphia AQCR.
- Data preparation program for accessing the factor tables and emissions for the production of hourly values and the reporting of stack data.
- Post-processing programs for separation of major and minor point sources and the creation of packet files in the required format for the Airshed Model.

The first two components of the system are addressed in Chapters 4 and 5, respectively. The four remaining components and their use are described in the following sections.

EMISSION FILES

Except for highway motor vehicle data which came from DVRPC, the emission files used in this study were in EIS/P&R format. EIS/P&R is a subsystem of the Comprehensive Data Handling System maintained by EPA. It contains the same information as NEDS but is more flexible and capable of storing much more information.

Two basic types of files were maintained by ES: point sources and area sources. The area source file had the same basic format as point sources but a slightly different file organization. The standard file contains area emissions on a category-by-category basis; typical categories are commercial fuel combustion, gasoline fuel marketing, and vehicle-miles travelled (VMT). Each category consists of several activities. In the VMT category, individual activities are: limited access roads, rural roads, suburban roads and urban roads. For this study, the file organization was changed so that emissions were reported on an activity-by-activity level. Each activity was treated as a discrete emission source contributing to the total emissions of a particular grid square. In this way, a unique SCC identifier was associated with each emission contribution, which eased the task of computing emissions and the temporal distribution and improved the accuracy of the final product.

Another change to the area source file organization was that activity levels and emissions were tabulated by grid square after allocation instead of by county (Figure 6.1). Grid square identification numbers appeared in the AQCR and PLANT ID identifiers.

Within the point source masterfile, emissions from each process at a multi-process point were not available. Therefore, a single SCC at a multi-process point had to be used as the basis for applying VOC/NO_x component factors. The first SCC that occurred for each emission point was used to identify the process for speciation purposes. The VOC or NO_x profile was then obtained based on that process. Typically, the first SCC code in the point source file represented the most significant contribution to emissions for the emission point. In some cases, where multiple SCCs were needed to describe the process more completely, ES simply used the first SCC code that occurred in the file. The use of the first SCC thus led to selection of the appropriate VOC/NO_x component factor for the emissions. Since temporal factors were grouped by plant and point instead of SCC (except for storage tanks), they were unaffected.

It was important to review the inventory before processing began to ensure that operating schedule data were in order. The operating information was used in computing the temporal distributions if particular factors did not appear in the temporal factor table. A check of sources with VOC or NO_x emissions greater than zero identified specific processes and SCCs which needed component factors.

DATA PREPARATION PROGRAM

The data preparation program accessed the temporal and VOC/NO_x component factor files and set up a temporary table index. Then, on a source-by-source basis, the program performed a table look-up procedure to find specific component and temporal distribution data. First, this was done by point identification sequence number, and then, if necessary, by process. Some points had multiple SCCs to fully describe the activities occurring there. When temporal or component factors were to be selected on a process basis, the first non-zero SCC was used in the table look-up procedure.

If temporal data were not found, the normal operating schedule contained in the the masterfile was used as a basis for computing the point source factors. The Airshed Model requires determination of emissions for each of the 24-hourly periods during the day. Hour one corresponds to the period of midnight to one a.m. standard time, and so on, ending with hour 24, which is 11 p.m. to midnight standard time. In order to generate hourly emissions from the EIS/P&R operating data, certain assumptions had to be made. For sources operating during the June, July, and August (oxidant) season, the typical weekday emission was assumed to be:

$$\frac{\text{(\% Emissions In Oxidant Season)(Annual Emissions)}}{\text{(Days Of Operation Per Week)(13 Weeks In Oxidant Season)}}.$$

Emissions were spread uniformly throughout the number of hours operated per day. Any source not operating 24 hours per day was assumed to begin operation on hour eight (7 a.m. to 8 a.m. standard time) and continue to operate each succeeding hour until the total hours operated per day was reached. The reason for this assumption is that most businesses which do not operate continuously begin work at this time (7 a.m.). If the EIS/P&R seasonal throughput field was blank or zero for all seasons, 25% per season was assumed. If the days per week field was blank or zero, seven days per week was assumed, and likewise, if the hours per day field was blank or zero, 24 hours per day was assumed.

If component data were not found, the reported component emissions were set to zero and an error message was printed. The preliminary review of the emission files ensured that component factors were available for all processes with VOC or NO_x emissions greater than zero. All factors used to disaggregate the annual emissions were listed by the program for documentation purposes.

Once all factors were accessed, component emissions were computed on an hourly basis for each of the 24 hours by multiplying the annual emissions by the appropriate factors. The computed hourly emissions were placed in matrix form similar to that required for the EMISSIONS VALUES output packet. A post-processing program selected emissions for the hour of interest and output the packet in its required format. If the input file contained major point source data, a POINT SOURCES packet was prepared using the Airshed Model format and giving identification, location, stack height, diameter, velocity and temperature. If diameter, velocity, and temperature were all non-zero, PLUMERISE was entered as source type in the POINT SOURCES packet (Table 6.4). This indicated to the Airshed Model that a plume rise should be calculated. If any of the three items were zero, STACKHGT was used as source type, which indicated that plume rise should not be calculated and that the effective height of the plume was equivalent to the height of the stack.

MAJOR/MINOR SOURCE DIVISION

Major point sources, those that passed certain criteria for significance, were separated from minor point sources using the EIS/P&R retrieval program and processed by the data preparation program. Two criteria were used to select the sources to be included in the POINT SOURCES and EMISSIONS VALUES packets (major point sources). The emissions of VOC or NO_x for a given stack had to be greater than 500 tons per year. The second criterion was that the plume height had to be greater than 50 meters under unstable atmospheric conditions and light winds (two meters per second). The result was that 29 plants and 97 points were included as major sources for the 1979 data and 30 plants and 98 points for the 1987 data.

A post-processing program then put the required information in EMISSIONS VALUES packet format. Minor point, area, and highway vehicle sources were also processed by the data preparation program. However, the output was sent to an intermediate program before being put in packet format. The intermediate program was responsible for assigning the hourly component emissions from each minor point source to the grid in which it was located. The post-processing program then took the output and placed it in GRID VALUES packet format.

POST-PROCESSING PROGRAM

A post-processing program took the output from the data preparation program, which produced emissions values for each of 24 hours, and created an EMISSIONS VALUES packet for major point sources or a GRID VALUES packet for minor point, area, or highway vehicle sources, depending on the input file. A TIME INTERVAL packet was also produced which specified the beginning and ending date and time for which the other packets were valid. For this study, emissions data for all sources were furnished for each hour of the typical weekday of the oxidant season; no persistence of emissions from hour to hour was assumed.

In addition to supplying the Airshed Model emissions input on magnetic tape, ES provided EPA with EIS/P&R masterfiles for point and area sources, temporal factor files, VOC/NO_x component factor files, area source emission and grid allocation files, and county level NEDS activity parameters on magnetic tape.

SHIFT TO DAYLIGHT TIME

Near the conclusion of this project, EPA requested that the Airshed Model input, which was developed for the oxidant season, reflect daylight (local) time. As the last step in the data processing routine, ES shifted the hourly emissions values forward one hour so that all values represented daylight time instead of standard time. Hour one became midnight to 1 a.m. daylight time, and so on, with hour 24 being changed to 11 p.m. to midnight daylight time. Highway vehicle emissions data provided by DVRPC were unaffected since emissions already reflected daylight time.

APPENDIX A

NEDS AREA SOURCE INPUT FORMS

The following pages show values for all activity parameters generated for the 11 counties in the Philadelphia AQCR for 1979 and 1987. The methodologies used to determine the values are described in Chapter 3 of this report.

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ________

Name of Person Completing Form ________

State		County				AQCR		
1	2	3	4	5	6	7	8	9
3	9	1	2	0	0	0	4	5

		EMISSION ESTIMATES (10^2 tons)					SULFUR CONTENT (%)				ASH CONTENT (%)		RESIDENTIAL FUEL								
Year of Record	Particulate	SO$_2$	NO$_x$	HC	CO		Anth. Coal	Bitum. Coal	Dist. Oil	Resid. Oil	Anth. Coal	Bitum. Coal	Anth. 10^2 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gal.	Resid. Oil 10^4 Gal.	Nat. Gas 10^7 ft.^{3}	Wood 10^2 tons	Action		cd
10 11	12 13 14 15 16	17 18 19 20 21	22 23 24 25	26 27 28 29 30	31 32 33 34 35		36 37	38 39	40 41	42 43	44 45 46	47 48 49	50 51 52 53	54 55 56 57 58	59 60 61 62 63	64 65 66 67 68	69 70 71 72 73	74 75 76 77	78	79	80
79							0▲7	3▲0	0▲3	1▲0	12▲6	11▲2	74		10071		600	9	A	A	1

COMMERCIAL AND INSTITUTIONAL FUEL						INDUSTRIAL FUEL						OFF HIWAY DIESEL					
Anth. 10^1 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Wood 10^2 tons	Anth. Coal 10^1 tons	Bitum. Coal 10^1 tons	Coke 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft.^{3}	Farm 10^3 Gals.	Const. 10^4 Gals.		Action		cd
10 11 12 13 14	15 16 17 18 19	20 21 22 23 24	25 26 27 28 29	30 31 32 33	34 35	36 37 38 39 40 41	42 43 44 45 46 47	48 49 50 51	52 53 54 55 56	57 58 59 60 61	62 63 64 65 66	67 68 69	70 71 72 73	74 75 76 77	78	79	80
		1493	2260	267					574	2209	171	98	133		A	A	2

ON SITE INCINERATION	SURFACE COATING			DEGREASING						DIESEL FUEL							
Comm. Inst. 10^2 tons	Archi-tectural 10^2 lbs.	Auto Refinish. tons	Industrial 10^2 lbs.	Cold Cleaning 10^2 lbs.	O.T. Vapor & Conveyorized 10^2 lbs.	Comm./Cons. Solvent 10^2 lbs.	Graphic Arts 10^2 lbs.	Small Processes tons	Industrial Equip. 10^3 Gals.		Rail Locomotive 10^4 Gals.	County Population 10^3	Density Code	Action		cd
10 11 12 13 14 15	16 17 18 19 20	21 22 23 24	25 26 27 28 29 30	31 32 33 34 35 36	37 38 39 40 41 42	43 44 45 46 47 48 49	50 51 52 53 54	55 56 57 58 59	60 61 62 63 64	65 66 67	68 69 70 71 72	73 74 75 76	77	78	79	80
0	21749	835	70200	18912	21536	47280	3782	4394	2708		601	473		A	A	3

AIRCRAFT			VESSELS				GASOLINE MARKETING			OFF HIWAY GASOLINE						
Military LTO CYC 10^1	Civil LTO CYC 10^1	Commercial LTO CYC 10^1	Anth. Coal 10^1 tons	Diesel Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Gasoline 10^3 Gals.	Stage I 10^4 Gals.	Stage II 10^4 Gals.	Other 10^4 Gals.	Farm 10^3 Gals.	Const. 10^3 Gals.	Small Engines 10^3 Gals.		Action		cd
10 11 12 13	14 15 16 17 18	19 20 21 22 23	24 25 26 27	28 29 30 31	32 33 34 35 36	37 38 39 40	41 42 43 44 45 46	47 48 49 50 51	52 53 54 55 56 57	58 59 60 61 62 63	64 65 66 67 68 69	70 71 72 73 74 75 76	77	78	79	80
36	18909	423		4	42	758	22062	22062	22062	843	100	1567		A	A	4

				FOREST FIRES		AGRICULTURAL & MISC. BURNING		INDUSTRIAL EQUIPMENT			PRESCRIBED BURNING					
Cutback Asphalt tons	Nat. Gas Leaks 10^3 lbs.	Dry Cleaning Solvent 10^2 lbs.	Pesticide Use 10^2 lbs.	Area - Acres	Quant. ton/acre	Area - Acres	Quant. tons/acre	Gas 10^3 Gals.		Structure Fires #/year	Area-Acres	Quant. Tons/acre		Action		cd
10 11 12 13 14 15 16	17 18 19 20 21	22 23 24 25 26	27 28 29 30 31	32 33 34 35 36 37 38	39 40 41	42 43 44 45 46 47	48 49 50	51 52 53 54	55 56 57	58 59 60 61	62 63 64 65 66 67	68 69 70	71 72 73 74 75 76 77	78	79	80
554	2880	11347	15359	1	11	496	1	989	1	1000	4	70		A	A	6

COMMENTS

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27–77	Action 78	79	cd 80
B	U	C	K	S		C	O	U	N	T	Y		1	9	7	9		A	A	6

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NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ______________

Name of Person
Completing Form ______________________________

State (1-2)	County (3-6)	AQCR (7-9)
31	0640	045

Year of Record (10-11)	EMISSION ESTIMATES (10^2 tons) Particulate (12-16)	SO$_2$ (17-21)	NO$_x$ (22-25)	HC (26-30)	CO (31-35)	SULFUR CONTENT (%) Anth. Coal (36-37)	Bitum. Coal (38-39)	Dist. Oil (40-41)	Resid Oil (42-43)	ASH CONTENT (%) Anth. Coal (44-46)	Bitum. Coal (47-49)	RESIDENTIAL FUEL Anth. 10^2 tons (50-53)	Bitumin. 10^1 tons (54-58)	Dist. Oil 10^4 Gal. (59-63)	Resid. Oil 10^4 Gal. (64-68)	Nat. Gas 10^7 ft.^{3} (69-73)	Wood 10^2 tons (74-77)	Action (78)	(79)	cd (80)
79						0.6	0.7	0.2	0.3	03.7	07.5	120		5200		680	7	A	A	1

COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10^1 tons (10-14)	Bitumin. 10^1 tons (15-19)	Dist. Oil 10^4 Gals. (20-24)	Resid. Oil 10^4 Gals. (25-29)	Nat. Gas 10^7 Ft^3 (30-33)	Wood 10^2 tons (34-35)	INDUSTRIAL FUEL Anth. Coal 10^1 tons (36-41)	Bitum. Coal 10^1 tons (42-47)	Coke 10^1 tons (48-51)	Dist. Oil 10^4 Gals. (52-56)	Resid. Oil 10^4 Gals. (57-61)	Nat. Gas 10^7 Ft.^{3} (62-66)	OFF HIWAY DIESEL Farm 10^3 Gals. (67-69)	Const. 10^4 Gals. (70-73)	(74-77)	Action (78)	(79)	cd (80)
		2360	1729	200			339					38	80		A	A	2

ON SITE INCINERATION Comm. Inst. 10^2 tons (10-15)	SURFACE COATING Archi-tectural 10^2 lbs. (16-20)	Auto Refinish. tons (21-24)	Industrial 10^2 lbs. (25-30)	DEGREASING Cold Cleaning 10^2 lbs. (31-36)	O.T. Vapor & Conveyorized 10^2 lbs. (37-42)	Comm./Cons. Solvent 10^2 lbs. (43-49)	Graphic Arts 10^2 lbs. (50-54)	Small Processes tons (55-59)	Industrial Equip. 10^3 Gals. (60-64)	DIESEL FUEL (65-67)	Rail Locomotive 10^4 Gals. (68-72)	County Population 10^3 (73-76)	[illegible] (77)	Action (78)	(79)	cd (80)
57	16683	442	68060	14507	8808	36268	2901	1863	1217		256	363		A	A	3

AIRCRAFT Military LTO CYC 10^1 (10-13)	Civil LTO CYC 10^1 (14-18)	Commercial LTO CYC 10^1 (19-23)	VESSELS Anth. Coal 10^1 tons (24-27)	Diesel Oil 10^4 Gals. (28-31)	Resid. Oil 10^4 Gals. (32-36)	Gasoline 10^3 Gals. (37-40)	GASOLINE MARKETING Stage I 10^4 Gals. (41-46)	Stage II 10^4 Gals. (47-51)	Other 10^4 Gals. (52-57)	OFF HIWAY GASOLINE Farm 10^3 Gals. (58-63)	Const. 10^3 Gals. (64-69)	Small Engines 10^3 Gals. (70-76)	(77)	Action (78)	(79)	cd (80)
4187	13422	576		29	290	316	18506	18506	18506	565	60	1146		A	A	4

Cutback Asphalt tons (10-16)	Nat. Gas Leaks 10^3 lbs. (17-21)	Dry Cleaning Solvent 10^2 lbs. (22-26)	Pesticide Use 10^2 lbs. (27-31)	FOREST FIRES Area Acres (32-38)	Quant. ton/acre (39-41)	AGRICULTURAL & MISC. BURNING Area Acres (42-47)	Quant. tons/acre (48-50)	INDUSTRIAL EQUIPMENT Gas 10^3 Gals. (51-54)	(55-57)	Structure Fires #/year (58-61)	PRESCRIBED BURNING Area-Acres (62-67)	Quant. tons/acre (68-70)	(71-77)	Action (78)	(79)	cd (80)
2531	2384	7562	28048	1967	11	316	1	444	1	1363	21800	1		A	A	5

COMMENTS (10-77)	Action (78)	(79)	cd (80)
BURLINGTON COUNTY 1979	A	A	6

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NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ____________

Name of Person Completing Form ____________________________

State	County	AQCR
1–2	3–6	7–9
31	0740	045

Year of Record	EMISSION ESTIMATES (10^2 tons) Particulate	SO$_2$	NO$_x$	HC	CO	SULFUR CONTENT (%) Anth. Coal	Bitum. Coal	Dist. Oil	Resid. Oil	ASH CONTENT (%) Anth. Coal	Bitum. Coal	RESIDENTIAL FUEL Anth. 10^2 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gal.	Resid. Oil 10^4 Gal.	Nat. Gas 10^7 ft.^{3}	Wood 10^2 tons	Action		cd
10–11	12–16	17–21	22–25	26–30	31–35	36–37	38–39	40–41	42–43	44–46	47–49	50–53	54–58	59–63	64–68	69–73	74–77	78	79	80
79						0▲6	2▲1	0▲2	0▲3	09▲0	10▲4	184		9440		1160	2	A	A	1

COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10^1 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Wood 10^2 tons	INDUSTRIAL FUEL Anth. Coal 10^1 tons	Bitum. Coal 10^1 tons	Coke 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft.^{3}	OFF HIWAY DIESEL Farm 10^3 Gals.	Const. 10^4 Gals.		Action		cd
10–14	15–19	20–24	25–29	30–33	34–35	36–41	42–47	48–51	52–56	57–61	62–66	67–69	70–73	74–77	78	79	80
		5301	3827	360			611				280	4	258		A	A	2

ON SITE INCINERATION Comm. Inst. 10^2 tons	SURFACE COATING Architectural 10^2 lbs.	Auto Refinish. tons	Industrial 10^2 lbs.	DEGREASING Cold Cleaning 10^2 lbs	O.T. Vapor & Conveyorized 10^2 lbs.	Comm./Cons. Solvent 10^2 lbs.	Graphic Arts 10^2 lbs.	Small Processes tons	Industrial Equip. 10^3 Gals.	DIESEL FUEL	Rail Locomotive 10^4 Gals.	County Population 10^3	Dummy Col	Action		cd
10–15	16–20	21–24	25–30	31–36	37–42	43–49	50–54	55–59	60–64	65–67	68–72	73–76	77	78	79	80
100	23177	780	40620	20154	11076	50384	4031	934	1993		368	504		A	A	3

AIRCRAFT Military LTO CYC 10^1	Civil LTO CYC 10^1	Commercial LTO CYC 10^1	VESSELS Anth. Coal 10^1 tons	Diesel Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Gasoline 10^3 Gals.	GASOLINE MARKETING Stage I 10^4 Gals.	Stage II 10^4 Gals.	Other 10^4 Gals.	OFF HIWAY GASOLINE Farm 10^3 Gals.	Const. 10^3 Gals.	Small Engines 10^3 Gals.		Action		cd
10–13	14–18	19–23	24–27	28–31	32–36	37–40	41–46	47–51	52–57	58–63	64–69	70–76	77	78	79	80
				69	674	67	23808	23808	23808	58	194	1624		A	A	4

Cutback Asphalt tons	Nat. Gas Leaks 10^3 lbs.	Dry Cleaning Solvent 10^2 lbs.	Pesticide Use 10^2 lbs.	FOREST FIRES Area - Acres	Quant. ton/acre	AGRICULTURAL & MISC. BURNING Area - Acres	Quant. tons/acre	INDUSTRIAL EQUIPMENT Gas 10^3 Gals.		Structure Fires #/year	PRESCRIBED BURNING Area-Acres	Quant. Tons/acre		Action		cd
10–16	17–21	22–26	27–31	32–38	39–41	42–47	48–50	51–54	55–57	58–61	62–67	68–70	71–77	78	79	80
2136	4881	10505	11882	983	11	98	1	728	1	969	0	0		A	A	5

COMMENTS	Action		cd
10–77	78	79	80
CAMDEN COUNTY 1979	A	A	6

EPA (DUR) 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ____________

Name of Person Completing Form ____________________________

State (1–2)	County (3–6)	AQCR (7–9)
19	1660	045

Year of Record (10–11)	EMISSION ESTIMATES (10^2 tons): Particulate (12–16)	SO$_2$ (17–21)	NO$_x$ (22–25)	HC (26–30)	CO (31–35)	SULFUR CONTENT (%): Anth. Coal (36–37)	Bitum. Coal (38–39)	Dist. Oil (40–41)	Resid Oil (42–43)	ASH CONTENT (%): Anth. Coal (44–46)	Bitum. Coal (47–49)	RESIDENTIAL FUEL: Anth. 10^2 tons (50–53)	Bitumin. 10^1 tons (54–58)	Dist. Oil 10^4 Gal. (59–63)	Resid. Oil 10^4 Gal. (64–68)	Nat. Gas 10^7 ft.^{3} (69–73)	Wood 10^2 tons (74–77)	Action (78)	(79)	cd (80)
79						0▲7	3▲0	0▲3	1▲0	12▲6	11▲2	98		7239		382	6	A	A	1

COMMERCIAL AND INSTITUTIONAL FUEL: Anth. 10^1 tons (10–14)	Bitumin. 10^1 tons (15–19)	Dist. Oil 10^4 Gals. (20–24)	Resid. Oil 10^4 Gals. (25–29)	Nat. Gas 10^7 Ft^3 (30–33)	Wood 10^2 tons (34–35)	INDUSTRIAL FUEL: Anth. Coal 10^1 tons (36–41)	Bitum. Coal 10^1 tons (42–47)	Coke 10^1 tons (48–51)	Dist. Oil 10^4 Gals. (52–56)	Resid. Oil 10^4 Gals. (57–61)	Nat. Gas 10^7 Ft.^{3} (62–66)	OFF HIWAY DIESEL: Farm 10^3 Gals. (67–69)	Const. 10^4 Gals. (70–73)	(74–77)	Action (78)	(79)	cd (80)
		886	1559	157					360	1679	280	190	94		A	A	2

ON SITE INCINERATION: Comm. Inst. 10^2 tons (10–15)	SURFACE COATING: Architectural 10^2 lbs. (16–20)	Auto Refinish. tons (21–24)	Industrial 10^2 lbs. (25–30)	DEGREASING: Cold Cleaning 10^2 lbs. (31–36)	O.T. Vapor & Conveyorized 10^2 lbs. (37–42)	Comm./Cons. Solvent 10^2 lbs. (43–49)	Graphic Arts 10^2 lbs. (50–54)	Small Processes tons (55–59)	Industrial Equip. 10^3 Gals. (60–64)	DIESEL FUEL (65–67)	Rail Locomotive 10^4 Gals. (68–72)	County Population 10^3 (73–76)	Density Code (77)	Action (78)	(79)	cd (80)
0	13879	465	54120	12069	13310	30173	434	438	1976		381	302	1	A	A	3

AIRCRAFT: Military LTO CYC 10^1 (10–13)	Civil LTO CYC 10^1 (14–18)	Commercial LTO CYC 10^1 (19–23)	VESSELS: Anth. Coal 10^1 tons (24–27)	Diesel Oil 10^4 Gals. (28–31)	Resid. Oil 10^4 Gals. (32–36)	Gasoline 10^3 Gals. (37–40)	GASOLINE MARKETING: Stage I 10^4 Gals. (41–46)	Stage II 10^4 Gals. (47–51)	Other 10^4 Gals. (52–57)	OFF HIWAY GASOLINE: Farm 10^3 Gals. (58–63)	Const. 10^3 Gals. (64–69)	Small Engines 10^3 Gals. (70–76)	(77)	Action (78)	(79)	cd (80)
10	7205	234				244	11184	11184	11184	1621	71	906		A	A	4

Cutback Asphalt tons (10–16)	Nat. Gas Leaks 10^1 lbs. (17–21)	Dry Cleaning Solvent 10^2 lbs. (22–26)	Pesticide Use 10^2 lbs. (27–31)	FOREST FIRES: Area - Acres (32–38)	Quant. ton/acre (39–41)	AGRICULTURAL & MISC. BURNING: Area - Acres (42–47)	Quant. tons/acre (48–50)	INDUSTRIAL EQUIPMENT: Gas 10^3 Gals. (51–54)	(55–57)	Structure Fires #/year (58–61)	PRESCRIBED BURNING: Area-Acres (62–67)	Quant. Tons/acre (68–70)	(71–77)	Action (78)	(79)	cd (80)
457	2258	7241	25309	27	11	651	1	722	1	3480	28	70		A	A	5

COMMENTS (10–77)	Action (78)	(79)	cd (80)
CHESTER COUNTY 1979	A	A	6

EPA [illegible] 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ____________

Name of Person
Completing Form ____________________

State	1–2	39
County	3–6	2360
AQCR	7–9	045

Year of Record	10–11	79
EMISSION ESTIMATES (10^2 tons) – Particulate	12–16	
EMISSION ESTIMATES – SO_2	17–21	
EMISSION ESTIMATES – NO_x	22–25	
EMISSION ESTIMATES – HC	26–30	
EMISSION ESTIMATES – CO	31–35	
SULFUR CONTENT (%) – Anth. Coal	36–37	0.7
SULFUR CONTENT (%) – Bitum. Coal	38–39	3.0
SULFUR CONTENT (%) – Dist. Oil	40–41	0.3
SULFUR CONTENT (%) – Resid. Oil	42–43	1.0
ASH CONTENT (%) – Anth. Coal	44–46	12.6
ASH CONTENT (%) – Bitum. Coal	47–49	11.2
RESIDENTIAL FUEL – Anth. 10^2 tons	50–53	85
RESIDENTIAL FUEL – Bitumin. 10^1 tons	54–58	
RESIDENTIAL FUEL – Dist. Oil 10^4 Gal.	59–63	11728
RESIDENTIAL FUEL – Resid. Oil 10^4 Gal.	64–68	
RESIDENTIAL FUEL – Nat. Gas 10^7 ft.^{3}	69–73	768
RESIDENTIAL FUEL – Wood 10^7 tons	74–77	5
Action	78	A
	79	A
cd	80	1

COMMERCIAL AND INSTITUTIONAL FUEL – Anth. 10^1 tons	10–14	
COMMERCIAL AND INSTITUTIONAL FUEL – Bitumin. 10^1 tons	15–19	
COMMERCIAL AND INSTITUTIONAL FUEL – Dist. Oil 10^4 Gals.	20–24	2117
COMMERCIAL AND INSTITUTIONAL FUEL – Resid. Oil 10^4 Gals.	25–29	3054
COMMERCIAL AND INSTITUTIONAL FUEL – Nat. Gas 10^7 Ft^3	30–33	382
COMMERCIAL AND INSTITUTIONAL FUEL – Wood 10^2 tons	34–35	
INDUSTRIAL FUEL – Anth. Coal 10^1 tons	36–41	
INDUSTRIAL FUEL – Bitum. Coal 10^1 tons	42–47	
INDUSTRIAL FUEL – Coke 10^1 tons	48–51	
INDUSTRIAL FUEL – Dist. Oil 10^4 Gals.	52–56	586
INDUSTRIAL FUEL – Resid. Oil 10^4 Gals.	57–61	2304
INDUSTRIAL FUEL – Nat. Gas 10^7 Ft^3	62–66	426
OFF HIWAY DIESEL – Farm 10^3 Gals.	67–69	9
OFF HIWAY DIESEL – Const. 10^4 Gals.	70–73	228
	74–77	
Action	78	A
	79	A
cd	80	2

ON SITE INCINERATION – Comm. Inst. 10^2 tons	10–15	0
SURFACE COATING – Architectural 10^2 lbs.	16–20	28170
SURFACE COATING – Auto Refinish. tons	21–24	889
SURFACE COATING – Industrial 10^2 lbs.	25–30	26540
DEGREASING – Cold Cleaning 10^2 lbs.	31–36	24496
DEGREASING – OT. Vapor & Conveyorized 10^2 lbs.	37–42	17158
Comm./Cons. Solvent 10^2 lbs.	43–49	61240
Graphic Arts 10^2 lbs.	50–54	4899
Small Processes tons	55–59	459
DIESEL FUEL – Industrial Equip. 10^3 Gals.	60–64	2072
DIESEL FUEL	65–67	
DIESEL FUEL – Rail Locomotive 10^4 Gals.	68–72	812
County Population 10^3	73–76	612
Dummy Col	77	
Action	78	A
	79	A
cd	80	3

AIRCRAFT – Military LTO CYC 10^1	10–13	14
AIRCRAFT – Civil LTO CYC 10^1	14–18	927
AIRCRAFT – Commercial LTO CYC 10^1	19–23	2704
VESSELS – Anth. Coal 10^1 tons	24–27	
VESSELS – Diesel Oil 10^4 Gals.	28–31	47
VESSELS – Resid. Oil 10^4 Gals.	32–36	445
VESSELS – Gasoline 10^3 Gals.	37–40	325
GASOLINE MARKETING – Stage I 10^4 Gals.	41–46	23664
GASOLINE MARKETING – Stage II 10^4 Gals.	47–51	23664
GASOLINE MARKETING – Other 10^4 Gals.	52–57	23664
OFF HIWAY GASOLINE – Farm 10^1 Gals.	58–63	78
OFF HIWAY GASOLINE – Const. 10^3 Gals.	64–69	172
OFF HIWAY GASOLINE – Small Engines 10^3 Gals.	70–76	1943
	77	
Action	78	A
	79	A
cd	80	4

Cutback Asphalt tons	10–16	345
Nat. Gas Leaks 10^3 lbs.	17–21	4310
Dry Cleaning Solvent 10^2 lbs.	22–26	14698
Pesticide Use 10^2 lbs.	27–31	1256
FOREST FIRES – Area - Acres	32–38	7
FOREST FIRES – Quant. ton/acre	39–41	11
AGRICULTURAL & MISC. BURNING – Area - Acres	42–47	60
AGRICULTURAL & MISC. BURNING – Quant. tons/acre	48–50	1
INDUSTRIAL EQUIPMENT – Gas 10^3 Gals.	51–54	757
INDUSTRIAL EQUIPMENT	55–57	1
Structure Fires #/year	58–61	2930
PRESCRIBED BURNING – Area-Acres	62–67	8
PRESCRIBED BURNING – Quant. tons/acre	68–70	70
	71–77	
Action	78	A
	79	A
cd	80	5

COMMENTS	10–77	DELAWARE COUNTY 1979
Action	78	A
	79	A
cd	80	6

EPA [illegible] 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ____________

Name of Person Completing Form ____________________

Field	Card columns	Entry
State	1–2	3 1
County	3–6	1 7 6 0
AQCR	7–9	0 8 5

Card 1

Field	Card columns	Entry
Year of Record	10–11	7 9
EMISSION ESTIMATES (10² tons): Particulate	12–16	
EMISSION ESTIMATES (10² tons): SO₂	17–21	
EMISSION ESTIMATES (10² tons): NOₓ	22–25	
EMISSION ESTIMATES (10² tons): HC	26–30	
EMISSION ESTIMATES (10² tons): CO	31–35	
SULFUR CONTENT (%): Anth. Coal	36–37	0.6
SULFUR CONTENT (%): Bitum. Coal	38–39	2.1
SULFUR CONTENT (%): Dist. Oil	40–41	0.3
SULFUR CONTENT (%): Resid Oil	42–43	0.2
ASH CONTENT (%): Anth. Coal	44–46	09.0
ASH CONTENT (%): Bitum. Coal	47–49	10.4
RESIDENTIAL FUEL: Anth. 10² tons	50–53	5 2
RESIDENTIAL FUEL: Bitumin. 10¹ tons	54–58	
RESIDENTIAL FUEL: Dist. Oil 10⁴ Gal.	59–63	4 0 0 0
RESIDENTIAL FUEL: Resid. Oil 10⁴ Gal.	64–68	
RESIDENTIAL FUEL: Nat. Gas 10⁷ ft.³	69–73	3 4 0
RESIDENTIAL FUEL: Wood 10² tons	74–77	
Action	78	A
	79	A
cd	80	1

Card 2

Field	Card columns	Entry
COMMERCIAL AND INSTITUTIONAL FUEL: Anth. 10¹ tons	10–14	
COMMERCIAL AND INSTITUTIONAL FUEL: Bitumin. 10¹ tons	15–19	
COMMERCIAL AND INSTITUTIONAL FUEL: Dist. Oil 10⁴ Gals.	20–24	1 1 0 4
COMMERCIAL AND INSTITUTIONAL FUEL: Resid. Oil 10⁴ Gals.	25–29	8 3 5
COMMERCIAL AND INSTITUTIONAL FUEL: Nat. Gas 10⁷ Ft³	30–33	
COMMERCIAL AND INSTITUTIONAL FUEL: Wood 10² tons	34–35	
INDUSTRIAL FUEL: Anth. Coal 10¹ tons	36–41	
INDUSTRIAL FUEL: Bitum. Coal 10¹ tons	42–47	2 2 4
INDUSTRIAL FUEL: Coke 10¹ tons	48–51	
INDUSTRIAL FUEL: Dist. Oil 10⁴ Gals.	52–56	
INDUSTRIAL FUEL: Resid. Oil 10⁴ Gals.	57–61	
INDUSTRIAL FUEL: Nat. Gas 10⁷ Ft.³	62–66	
OFF HIWAY DIESEL: Farm 10¹ Gals.	67–69	3 1
OFF HIWAY DIESEL: Const. 10⁴ Gals.	70–73	2 0
	74–77	
Action	78	A
	79	A
cd	80	2

Card 3

Field	Card columns	Entry
ON SITE INCINERATION: Comm. Inst. 10² tons	10–15	2 8
SURFACE COATING: Architectural 10² lbs.	16–20	9 4 7 6
SURFACE COATING: Auto Refinish. tons	21–24	2 2 1
SURFACE COATING: Industrial 10² lbs.	25–30	4 9 2 0
DEGREASING: Cold Cleaning 10² lbs.	31–36	8 2 3 6
DEGREASING: O.T. Vapor & Conveyorized 10² lbs.	37–42	4 3 5 4
Comm./Cons. Solvent 10² lbs.	43–49	2 0 5 9 0
Graphic Arts 10² lbs.	50–54	1 6 8 8
Small Processes tons	55–59	2 7 2
DIESEL FUEL: Industrial Equip. 10³ Gals.	60–64	7 5 7
DIESEL FUEL	65–67	
DIESEL FUEL: Rail Locomotive 10⁴ Gals.	68–72	1 4 4
County Population 10³	73–76	2 0 6
Density Class	77	
Action	78	A
	79	A
cd	80	3

Card 4

Field	Card columns	Entry
AIRCRAFT: Military LTO CYC 10¹	10–13	1 7
AIRCRAFT: Civil LTO CYC 10¹	14–18	9 6 7 0
AIRCRAFT: Commercial LTO CYC 10¹	19–23	3 8 1 1
VESSELS: Anth. Coal 10¹ tons	24–27	
VESSELS: Diesel Oil 10⁴ Gals.	28–31	7 6
VESSELS: Resid. Oil 10⁴ Gals.	32–36	7 2 4
VESSELS: Gasoline 10³ Gals.	37–40	8 8
	41	
GASOLINE MARKETING: Stage I 10⁴ Gals.	42–46	8 2 0 9
GASOLINE MARKETING: Stage II 10⁴ Gals.	47–51	8 2 0 9
GASOLINE MARKETING: Other 10⁴ Gals.	52–57	8 2 0 9
OFF HIWAY GASOLINE: Farm 10³ Gals.	58–63	4 5 6
OFF HIWAY GASOLINE: Const. 10³ Gals.	64–69	1 5
OFF HIWAY GASOLINE: Small Engines 10³ Gals.	70–76	6 0 3
	77	
Action	78	A
	79	A
cd	80	4

Card 5

Field	Card columns	Entry
Cutback Asphalt tons	10–16	1 5 8 2
Nat. Gas Leaks 10³ lbs.	17–21	9 2 1
Dry Cleaning Solvent 10² lbs.	22–26	4 2 9 5
Pesticide Use 10² lbs.	27–31	4 3 5 8 1
FOREST FIRES: Area - Acres	32–38	4 5 4
FOREST FIRES: Quant. ton/acre	39–41	1.1
AGRICULTURAL & MISC. BURNING: Area - Acres	42–47	4 5 8
AGRICULTURAL & MISC. BURNING: Quant. tons/acre	48–50	1
INDUSTRIAL EQUIPMENT: Gas 10³ Gals.	51–54	2 8 0
INDUSTRIAL EQUIPMENT	55–57	1
Structure Fires #/year	58–61	2 1 5
PRESCRIBED BURNING: Area-Acres	62–67	2 5 9
PRESCRIBED BURNING: Quant. tons/acre	68–70	1
	71–77	
Action	78	A
	79	A
cd	80	5

COMMENTS

Field	Card columns	Entry
COMMENTS	10–77	GLOUCESTER COUNTY 1979
Action	78	A
	79	A
cd	80	6

EPA (DUR) 211

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ____________

Name of Person Completing Form ____________________

State (1–2)	County (3–6)	AQCR (7–9)
31	2980	045

Year of Record (10–11)	EMISSION ESTIMATES (10^2 tons) Particulate (12–16)	SO$_2$ (17–21)	NO$_x$ (22–25)	HC (26–30)	CO (31–35)	SULFUR CONTENT (%) Anth. Coal (36–37)	Bitum. Coal (38–39)	Dist. Oil (40–41)	Resid Oil (42–43)	ASH CONTENT (%) Anth. Coal (44–46)	Bitum. Coal (47–49)	RESIDENTIAL FUEL Anth. 10^2 tons (50–53)	Bitumin. 10^1 tons (54–58)	Dist. Oil 10^4 Gal. (59–63)	Resid. Oil 10^4 Gal. (64–68)	Nat. Gas 10^7 ft.^{3} (69–73)	Wood 10^7 tons (74–77)	Action (78)	(79)	cd (80)
79						0.6	1.8	0.2	0.6	09.0	11.6	112		6560		720	2	A	A	1

COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10^1 tons (10–14)	Bitumin. 10^1 tons (15–19)	Dist. Oil 10^4 Gals. (20–24)	Resid. Oil 10^4 Gals. (25–29)	Nat. Gas 10^7 Ft^3 (30–33)	Wood 10^2 tons (34–35)	INDUSTRIAL FUEL Anth. Coal 10^1 tons (36–41)	Bitum. Coal 10^1 tons (42–47)	Coke 10^1 tons (48–51)	Dist. Oil 10^4 Gals. (52–56)	Resid. Oil 10^4 Gals. (57–61)	Nat. Gas 10^7 Ft.^{3} (62–66)	OFF HIWAY DIESEL Farm 10^3 Gals. (67–69)	Const. 10^4 Gals. (70–73)	(74–77)	Action (78)	(79)	cd (80)
		5055	3926	340			699			1605	320	18	32		A	A	2

ON SITE INCINERATION Comm. Inst. 10^2 tons (10–15)	SURFACE COATING Archi-tectural 10^2 lbs. (16–20)	Auto Refinish. tons (21–24)	Industrial 10^2 lbs. (25–30)	DEGREASING Cold Cleaning 10^2 lbs. (31–36)	O.T. Vapor & Conveyorized 10^2 lbs. (37–42)	Comm./Cons. Solvent 10^2 lbs. (43–49)	Graphic Arts 10^2 lbs. (50–54)	Small Processes tons (55–59)	Industrial Equip. 10^3 Gals. (60–64)	DIESEL FUEL (65–67)	Rail Locomotive 10^4 Gals. (68–72)	County Population 10^3 (73–76)	Dens Cd (77)	Action (78)	(79)	cd (80)
6 6	15347	439	71960	13345	11865	33354	1909	2086	1605		240	338		A	A	3

AIRCRAFT Military LTO CYC 10^1 (10–13)	Civil LTO CYC 10^1 (14–18)	Commercial LTO CYC 10^1 (19–23)	VESSELS Anth. Coal 10^1 tons (24–27)	Diesel Oil 10^4 Gals. (28–31)	Resid. Oil 10^4 Gals. (32–36)	Gasoline 10^3 Gals. (37–40)	GASOLINE MARKETING Stage I 10^4 Gals. (41–46)	Stage II 10^4 Gals. (47–51)	Other 10^4 Gals. (52–57)	OFF HIWAY GASOLINE Farm 10^3 Gals. (58–63)	Const. 10^3 Gals. (64–69)	Small Engines 10^3 Gals. (70–76)	(77)	Action (78)	(79)	cd (80)
	11201	526		1	9	89	15838	15438	15438	269	24	1063		A	A	4

Cutback Asphalt tons (10–16)	Nat. Gas Leaks 10^3 lbs. (17–21)	Dry Cleaning Solvent 10^2 lbs. (22–26)	Pesticide Use 10^2 lbs. (27–31)	FOREST FIRES Area - Acres (32–38)	Quant. ton/acre (39–41)	AGRICULTURAL & MISC. BURNING Area - Acres (42–47)	Quant. tons/acre (48–50)	INDUSTRIAL EQUIPMENT Gas 10^3 Gals. (51–54)	(55–57)	Structure Fires #/year (58–61)	PRESCRIBED BURNING Area-Acres (62–67)	Quant. Tons/acre (68–70)	(71–77)	Action (78)	(79)	cd (80)
1463	3740	6956	8303	0	0	128	1	586	1	433	0	0		A	A	5

COMMENTS (10–77)	Action (78)	(79)	cd (80)
MERCER COUNTY 1979	A	A	6

EPA (DUR) 213

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form

Date ______________

Name of Person Completing Form ______________

State	1–2	39
County	3–6	6000
AQCR	7–9	045

Year of Record		10–11	79
EMISSION ESTIMATES (10^2 tons)	Particulate	12–16	
	SO_2	17–21	
	NO_x	22–25	
	HC	26–30	
	CO	31–35	
SULFUR CONTENT (%)	Anth. Coal	36–37	0.7
	Bitum. Coal	38–39	3.0
	Dist. Oil	40–41	0.3
	Resid Oil	42–43	1.0
ASH CONTENT (%)	Anth. Coal	44–46	12.6
	Bitum. Coal	47–49	11.2
RESIDENTIAL FUEL	Anth. 10^2 tons	50–53	195
	Bitumin. 10^1 tons	54–58	
	Dist. Oil 10^4 Gal.	59–63	14174
	Resid. Oil 10^4 Gal.	64–68	
	Nat. Gas 10^7 ft.^{3}	69–73	849
	Wood 10^7 tons	74–77	4
Action		78	A
		79	A
cd		80	1

COMMERCIAL AND INSTITUTIONAL FUEL	Anth. 10^1 tons	10–14	1085
	Bitumin. 10^1 tons	15–19	127
	Dist. Oil 10^4 Gals.	20–24	3674
	Resid. Oil 10^4 Gals.	25–29	4263
	Nat. Gas 10^7 Ft^3	30–33	617
	Wood 10^2 tons	34–35	
INDUSTRIAL FUEL	Anth. Coal 10^1 tons	36–41	
	Bitum. Coal 10^1 tons	42–47	3720
	Coke 10^1 tons	48–51	
	Dist. Oil 10^4 Gals.	52–56	
	Resid. Oil 10^4 Gals.	57–61	4674
	Nat. Gas 10^7 Ft.^{3}	62–66	820
OFF HIWAY DIESEL	Farm 10^3 Gals.	67–69	76
	Const. 10^4 Gals.	70–73	450
		74–77	
Action		78	A
		79	A
cd		80	2

ON SITE INCINERATION	Comm. Inst. 10^2 tons	10–15	0
SURFACE COATING	Architectural 10^2 lbs.	16–20	31052
	Auto Refinish. tons	21–24	1144
	Industrial 10^2 lbs.	25–30	167000
DEGREASING	Cold Cleaning 10^2 lbs.	31–36	27002
	O.T. Vapor & Conveyorized 10^2 lbs.	37–42	39468
	Comm./Cons. Solvent 10^2 lbs.	43–49	67605
	Graphic Arts 10^2 lbs.	50–54	5400
	Small Processes tons	55–59	2518
DIESEL FUEL	Industrial Equip. 10^3 Gals.	60–64	5414
		65–67	
	Rail Locomotive 10^4 Gals.	68–72	752
County Population 10^3		73–76	675
Census Code		77	
Action		78	A
		79	A
cd		80	3

AIRCRAFT	Military LTO CYC 10^1	10–13	55
	Civil LTO CYC 10^1	14–18	17054
	Commercial LTO CYC 10^1	19–23	1316
VESSELS	Anth. Coal 10^1 tons	24–27	
	Diesel Oil 10^4 Gals.	28–31	
	Resid. Oil 10^4 Gals.	32–36	
	Gasoline 10^3 Gals.	37–40	602
GASOLINE MARKETING	Stage I 10^4 Gals.	41–46	36840
	Stage II 10^4 Gals.	47–51	36840
	Other 10^4 Gals.	52–57	36840
OFF HIWAY GASOLINE	Farm 10^3 Gals.	58–63	653
	Const. 10^3 Gals.	64–69	339
	Small Engines 10^3 Gals.	70–76	1939
		77	
Action		78	A
		79	A
cd		80	4

Cutback Asphalt tons		10–16	570
Nat. Gas Leaks 10^2 lbs.		17–21	6232
Dry Cleaning Solvent 10^2 lbs.		22–26	16201
Pesticide Use 10^2 lbs.		27–31	8404
FOREST FIRES	Area - Acres	32–38	7
	Quant. ton/acre	39–41	11
AGRICULTURAL & MISC. BURNING	Area - Acres	42–47	268
	Quant. tons/acre	48–50	1
INDUSTRIAL EQUIPMENT	Gas 10^3 Gals.	51–54	1978
		55–57	1
Structure Fires #/year		58–61	3854
PRESCRIBED BURNING	Area-Acres	62–67	4
	Quant. tons/acre	68–70	70
		71–77	
Action		78	A
		79	A
cd		80	5

COMMENTS	10–77	MONTGOMERY COUNTY 1979
Action	78	A
	79	A
cd	80	6

EPA [illegible] 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ____________

Name of Person
Completing Form ____________________________

State		County				AQCR		
1	2	3	4	5	6	7	8	9
0	8	0	1	8	0	0	4	5

Field	Columns	Entry
Year of Record	10–11	79
EMISSION ESTIMATES (10^2 tons) Particulate	12–16	
SO$_2$	17–21	
NO$_x$	22–25	
HC	26–30	
CO	31–35	
SULFUR CONTENT (%) Anth. Coal	36–37	0.7
SULFUR CONTENT (%) Bitum. Coal	38–39	1.0
SULFUR CONTENT (%) Dist. Oil	40–41	0.3
SULFUR CONTENT (%) Resid Oil	42–43	1.0
ASH CONTENT (%) Anth. Coal	44–46	09.0
ASH CONTENT (%) Bitum. Coal	47–49	
RESIDENTIAL FUEL Anth. 10^2 tons	50–53	47
Bitumin. 10^1 tons	54–58	
Dist. Oil 10^4 Gal.	59–63	4996
Resid. Oil 10^4 Gal.	64–68	
Nat. Gas 10^7 ft.^{3}	69–73	747
Wood 10^2 tons	74–77	21
Action	78	A
	79	A
cd	80	1

Field	Columns	Entry
COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10^1 tons	10–14	52
Bitumin. 10^1 tons	15–19	
Dist. Oil 10^4 Gals.	20–24	3431
Resid. Oil 10^4 Gals.	25–29	593
Nat. Gas 10^7 Ft^3	30–33	248
Wood 10^2 tons	34–35	
INDUSTRIAL FUEL Anth. Coal 10^1 tons	36–41	
Bitum. Coal 10^1 tons	42–47	
Coke 10^1 tons	48–51	
Dist. Oil 10^4 Gals.	52–56	
Resid. Oil 10^4 Gals.	57–61	
Nat. Gas 10^7 Ft.^{3}	62–66	266
OFF HIWAY DIESEL Farm 10^3 Gals.	67–69	59
OFF HIWAY DIESEL Const. 10^4 Gals.	70–73	190
	74–77	
Action	78	A
	79	A
cd	80	2

Field	Columns	Entry
ON SITE INCINERATION Comm. Inst. 10^2 tons	10–15	0
SURFACE COATING Archi-tectural 10^2 lbs.	16–20	18556
SURFACE COATING Auto Refinish. tons	21–24	736
SURFACE COATING Industrial 10^2 lbs.	25–30	49240
DEGREASING Cold Cleaning 10^2 lbs.	31–36	16134
DEGREASING O.T. Vapor & Conveyorized 10^2 lbs.	37–42	9079
Comm./Cons. Solvent 10^2 lbs.	43–49	40335
Graphic Arts 10^2 lbs.	50–54	3127
Small Processes tons	55–59	2740
Industrial Equip. 10^3 Gals.	60–64	1736
DIESEL FUEL	65–67	
DIESEL FUEL Rail Locomotive 10^4 Gals.	68–72	54
County Population 10^3	73–76	401
County Code	77	
Action	78	A
	79	A
cd	80	3

Field	Columns	Entry
AIRCRAFT Military LTO CYC 10^1	10–13	
AIRCRAFT Civil LTO CYC 10^1	14–18	2995
AIRCRAFT Commercial LTO CYC 10^1	19–23	9740
VESSELS Anth. Coal 10^1 tons	24–27	
VESSELS Diesel Oil 10^4 Gals.	28–31	145
VESSELS Resid. Oil 10^4 Gals.	32–36	1439
VESSELS Gasoline 10^3 Gals.	37–40	1069
GASOLINE MARKETING Stage I 10^4 Gals.	41–46	20028
GASOLINE MARKETING Stage II 10^4 Gals.	47–51	20028
GASOLINE MARKETING Other 10^4 Gals.	52–57	20028
OFF HIWAY GASOLINE Farm 10^3 Gals.	58–63	557
OFF HIWAY GASOLINE Const. 10^3 Gals.	64–69	150
OFF HIWAY GASOLINE Small Engines 10^3 Gals.	70–76	1148
	77	
Action	78	A
	79	A
cd	80	4

Field	Columns	Entry
Cutback Asphalt tons	10–16	202
Nat. Gas Leaks 10^3 lbs.	17–21	3417
Dry Cleaning Solvent 10^2 lbs.	22–26	9460
Pesticide Use 10^2 lbs.	27–31	11646
FOREST FIRES Area - Acres	32–38	42
FOREST FIRES Quant. tons/acre	39–41	11
AGRICULTURAL & MISC. BURNING Area - Acres	42–47	70
AGRICULTURAL & MISC. BURNING Quant. tons/acre	48–50	1
INDUSTRIAL EQUIPMENT Gas 10^3 Gals.	51–54	634
	55–57	1
Structure Fires #/year	58–61	2420
PRESCRIBED BURNING Area-Acres	62–67	0
PRESCRIBED BURNING Quant. Tons/acre	68–70	0
	71–77	
Action	78	A
	79	A
cd	80	5

COMMENTS

Columns	10–77	78 (Action)	79	80 (cd)
Entry	NEW CASTLE COUNTY 1979	A	A	6

EPA (DUR) 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ____________

Name of Person
Completing Form ____________________________

State		County				AQCR		
1	2	3	4	5	6	7	8	9
3	9	7	1	6	0	0	4	5

Year of Record	10–11	7 9
EMISSION ESTIMATES (10^2 tons): Particulate	12–16	
SO$_2$	17–21	
NO$_x$	22–25	
HC	26–30	
CO	31–35	
SULFUR CONTENT (%): Anth. Coal	36–37	0 ▲ 6
Bitum. Coal	38–39	2 ▲ 1
Dist. Oil	40–41	0 ▲ 2
Resid Oil	42–43	0 ▲ 5
ASH CONTENT (%): Anth. Coal	44–46	1 3 ▲
Bitum. Coal	47–49	1 0 ▲ 4
RESIDENTIAL FUEL: Anth. 10^2 tons	50–53	1 0 8 7
Bitumin. 10^1 tons	54–58	
Dist. Oil 10^4 Gal.	59–63	2 1 8 2 1
Resid. Oil 10^4 Gal.	64–68	
Nat. Gas 10^7 ft.^{3}	69–73	4 0 0 1
Wood 10^2 tons	74–77	0
Action	78	A
	79	A
cd	80	1

COMMERCIAL AND INSTITUTIONAL FUEL: Anth. 10^1 tons	10–14	
Bitumin. 10^1 tons	15–19	
Dist. Oil 10^4 Gals.	20–24	1 9 2 0
Resid. Oil 10^4 Gals.	25–29	6 1 8 0
Nat. Gas 10^7 Ft^3	30–33	2 9
Wood 10^2 tons	34–35	
INDUSTRIAL FUEL: Anth. Coal 10^1 tons	36–41	-
Bitum. Coal 10^1 tons	42–47	
Coke 10^1 tons	48–51	
Dist. Oil 10^4 Gals.	52–56	
Resid. Oil 10^4 Gals.	57–61	
Nat. Gas 10^7 Ft^3	62–66	
OFF HIWAY DIESEL: Farm 10^3 Gals.	67–69	0
Const. 10^4 Gals.	70–73	8 6 1
	74–77	
Action	78	A
	79	A
cd	80	2

ON SITE INCINERATION: Comm. Inst. 10^2 tons	10–15	0
SURFACE COATING: Architectural 10^2 lbs.	16–20	8 9 1 8 9
Auto Refinish. tons	21–24	1 8 1 7
Industrial 10^3 lbs.	25–30	2 2 5 8 0 0
DEGREASING: Cold Cleaning 10^2 lbs.	31–36	7 7 5 5 6
O.T. Vapor & Conveyorized 10^2 lbs.	37–42	2 6 4 2 6
Comm./Cons. Solvent 10^2 lbs.	43–49	1 9 3 8 9 0
Graphic Arts 10^2 lbs.	50–54	9 3 7 1
Small Processes tons	55–59	3 8 8 0
DIESEL FUEL: Industrial Equip. 10^3 Gals.	60–64	9 0 6 9
	65–67	
Rail Locomotive 10^4 Gals.	68–72	2 3 3 1
County Population 10^3	73–76	1 9 3 9
	77	
Action	78	A
	79	A
cd	80	3

AIRCRAFT: Military LTO CYC 10^1	10–13	4 9 2
Civil LTO CYC 10^1	14–18	1 3 0 1 6
Commercial LTO CYC 10^1	19–23	8 2 8 0
VESSELS: Anth. Coal 10^1 tons	24–27	
Diesel Oil 10^4 Gals.	28–31	1 1 4
Resid. Oil 10^4 Gals.	32–36	1 1 2 9
Gasoline 10^3 Gals.	37–40	4 3 7
GASOLINE MARKETING: Stage I 10^4 Gals.	41–46	4 2 7 1 8
Stage II 10^4 Gals.	47–51	4 2 7 1 8
Other 10^4 Gals.	52–57	4 2 7 1 8
OFF HIWAY GASOLINE: Farm 10^3 Gals.	58–63	0
Const. 10^3 Gals.	64–69	6 4 8
Small Engines 10^3 Gals.	70–76	4 1 0 9
	77	
Action	78	A
	79	A
cd	80	4

Cutback Asphalt tons	10–16	6 8 4
Nat. Gas Leaks 10^3 lbs.	17–21	1 2 3 9 8
Dry Cleaning Solvent 10^2 lbs.	22–26	4 4 0 1 4
Pesticide Use 10^2 lbs.	27–31	0
FOREST FIRES: Area Acres	32–38	0
Quant. tons/acre	39–41	0
AGRICULTURAL & MISC. BURNING: Area Acres	42–47	0
Quant. tons/acre	48–50	0
INDUSTRIAL EQUIPMENT: Gas 10^3 Gals.	51–54	3 3 1 3
	55–57	1
Slashes Fires #/year	58–61	7 1 7 9
PRESCRIBED BURNING: Area-Acres	62–67	0
Quant. tons/acre	68–70	0
	71–77	
Action	78	A
	79	A
cd	80	6

COMMENTS	10–77	P H I L A D E L P H I A C O U N T Y 1 9 7 9
Action	78	A
	79	A
cd	80	6

EPA (DURH) 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form

Date ____________

Name of Person Completing Form ______________________________

State		County				AQCR		
1	2	3	4	5	6	7	8	9
3	1	4	9	0	0	0	4	5

	EMISSION ESTIMATES (10^2 tons)					SULFUR CONTENT (%)				ASH CONTENT (%)		RESIDENTIAL FUEL								
Year of Record	Particulate	SO_2	NO_x	HC	CO	Anth. Coal	Bitum. Coal	Dist. Oil	Resid. Oil	Anth. Coal	Bitum. Coal	Anth. 10^2 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gal.	Resid. Oil 10^4 Gal.	Nat. Gas 10^7 ft.^{3}	Wood 10^2 tons	Action		cd
10–11	12–16	17–21	22–25	26–30	31–35	36–37	38–39	40–41	42–43	44–46	47–49	50–53	54–58	59–63	64–68	69–73	74–77	78	79	80
79						0▲6	2▲1	0▲4	1▲3	09▲0	10▲4	18		1680		60	5	A	A	1

COMMERCIAL AND INSTITUTIONAL FUEL						INDUSTRIAL FUEL						OFF HIWAY DIESEL					
Anth. 10^1 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Wood 10^2 tons	Anth. Coal 10^1 tons	Bitum. Coal 10^1 tons	Coke 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft.^{3}	Farm 10^3 Gals.	Const. 10^4 Gals.		Action		cd
10–14	15–19	20–24	25–29	30–33	34–35	36–41	42–47	48–51	52–56	57–61	62–66	67–69	70–73	74–77	78	79	80
		338	225	40			180					39	10		A	A	2

ON SITE INCINERATION	SURFACE COATING			DEGREASING						DIESEL FUEL						
Comm. Inst. 10^2 tons	Archi-tectural 10^2 lbs.	Auto Refinish. tons	Industrial 10^2 lbs.	Cold Cleaning 10^2 lbs.	O.T. Vapor & Conveyorized 10^2 lbs.	Comm./Cons. Solvent 10^2 lbs.	Graphic Arts 10^2 lbs.	Small Processes tons	Industrial Equip. 10^3 Gals.		Rail Locomotive 10^4 Gals.	County Population 10^3	Density Code	Action		cd
10–15	16–20	21–24	25–30	31–36	37–42	43–49	50–54	55–59	60–64	65–67	68–72	73–76	77	78	79	80
7	3113	64	300	2707	42	6767	0	74	533		64	68		A	A	3

AIRCRAFT			VESSELS				GASOLINE MARKETING			OFF HIWAY GASOLINE						
Military LTO CYC 10^1	Civil LTO CYC 10^1	Commercial LTO CYC 10^1	Anth. Coal 10^1 tons	Diesel Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Gasoline 10^3 Gals.	Stage I 10^4 Gals.	Stage II 10^4 Gals.	Other 10^4 Gals.	Farm 10^3 Gals.	Const. 10^3 Gals.	Small Engines 10^3 Gals.		Action		cd
10–13	14–18	19–23	24–27	28–31	32–36	37–40	41–46	47–51	52–57	58–63	64–69	70–76	77	78	79	80
	968			120	1139	126	2570	2570	2570	581	8	207		A	A	4

				FOREST FIRES		AGRICULTURAL & MISC. BURNING		INDUSTRIAL EQUIPMENT			PRESCRIBED BURNING					
Cutback Asphalt tons	Nat. Gas Leaks 10^3 lbs.	Dry Cleaning Solvent 10^2 lbs.	Pesticide Use 10^2 lbs.	Area - Acres	Quant. ton/acre	Area - Acres	Quant. tons/acre	Gas 10^3 Gals.		Structure Fires #/year	Area-Acres	Quant. tons/acre		Action		cd
10–16	17–21	22–26	27–31	32–38	39–41	42–47	48–50	51–54	55–57	58–61	62–67	68–70	71–77	78	79	80
1028	271	1411	14306	378	11	257	1	195	1	282	0	0		A	A	5

COMMENTS	Action		cd
10–77	78	79	80
SALEM COUNTY 1979	A	A	6

EPA (DUR) 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ____________

Name of Person
Completing Form ______________________________

State	1 2	3 9
County	3 4 5 6	1 2 0 0
AQCR	7 8 9	0 4 5

Year of Record	10 11	8 7
EMISSION ESTIMATES (10^2 tons) Particulate	12 13 14 15 16	
SO$_2$	17 18 19 20 21	
NO$_x$	22 23 24 25	
HC	26 27 28 29 30	
CO	31 32 33 34 35	
SULFUR CONTENT (%) Anth. Coal	36 37	0 ▲ 7
Bitum. Coal	38 39	3 ▲ 0
Dist. Oil	40 41	0 ▲ 3
Resid Oil	42 43	1 ▲ 0
ASH CONTENT (%) Anth. Coal	44 45 46	1 2 ▲ 6
Bitum. Coal	47 48 49	1 1 ▲ 2
RESIDENTIAL FUEL Anth. 10^2 tons	50 51 52 53	2 8
Bitumin. 10^1 tons	54 55 56 57 58	
Dist. Oil 10^4 Gal.	59 60 61 62 63	1 0 0 7 1
Resid. Oil 10^4 Gal.	64 65 66 67 68	
Nat. Gas 10^7 ft.^{3}	69 70 71 72 73	6 8 1
Wood 10^2 tons	74 75 76 77	9
Action	78	A
	79	A
cd	80	1

COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10^1 tons	10 11 12 13 14	
Bitumin. 10^1 tons	15 16 17 18 19	
Dist. Oil 10^4 Gals.	20 21 22 23 24	1 5 4 8
Resid. Oil 10^4 Gals.	25 26 27 28 29	2 3 4 4
Nat. Gas 10^7 Ft^3	30 31 32 33	3 0 3
Wood 10^2 tons	34 35	
INDUSTRIAL FUEL Anth. Coal 10^1 tons	36 37 38 39 40 41	
Bitum. Coal 10^1 tons	42 43 44 45 46 47	
Coke 10^1 tons	48 49 50 51	
Dist. Oil 10^4 Gals.	52 53 54 55 56	5 7 6
Resid. Oil 10^4 Gals.	57 58 59 60 61	2 2 1 6
Nat. Gas 10^7 Ft.^{3}	62 63 64 65 66	1 9 4
OFF HIWAY DIESEL Farm 10^3 Gals.	67 68 69	1 0 3
Const. 10^4 Gals.	70 71 72 73	1 3 4
	74 75 76 77	
Action	78	A
	79	A
cd	80	2

ON SITE INCINERATION Comm. Inst. 10^2 tons	10 11 12 13 14 15	0
SURFACE COATING Architectural 10^2 lbs.	16 17 18 19 20	2 3 0 9 9
Auto Refinish. tons	21 22 23 24	8 8 7
Industrial 10^2 lbs.	25 26 27 28 29 30	7 0 4 1 6
DEGREASING Cold Cleaning 10^2 lbs.	31 32 33 34 35 36	2 0 0 8 6
O.T. Vapor & Conveyorized 10^2 lbs.	37 38 39 40 41 42	2 1 6 0 2
Comm./Cons. Solvent 10^2 lbs.	43 44 45 46 47 48 49	5 0 2 1 5
Graphic Arts 10^2 lbs.	50 51 52 53 54	4 0 1 7
Small Processes tons	55 56 57 58 59	4 4 0 8
DIESEL FUEL Industrial Equip. 10^3 Gals.	60 61 62 63 64	2 7 1 7
	65 66 67	
Rail Locomotive 10^4 Gals.	68 69 70 71 72	6 1 9
County Population 10^3	73 74 75 76	
Density Code	77	
Action	78	A
	79	A
cd	80	3

AIRCRAFT Military LTO CYC 10^1	10 11 12 13	3 6
Civil LTO CYC 10^1	14 15 16 17 18	2 5 2 8 7
Commercial LTO CYC 10^1	19 20 21 22 23	6 4 9
VESSELS Anth. Coal 10^1 tons	24 25 26 27	
Diesel Oil 10^4 Gals.	28 29 30 31	5
Resid. Oil 10^4 Gals.	32 33 34 35 36	4 7
Gasoline 10^3 Gals.	37 38 39 40	8 0 5
GASOLINE MARKETING Stage I 10^4 Gals.	41 42 43 44 45 46	1 7 5 2 2
Stage II 10^4 Gals.	47 48 49 50 51	1 7 5 2 2
Other 10^4 Gals.	52 53 54 55 56 57	1 7 6 2 2
OFF HIWAY GASOLINE Farm 10^3 Gals.	58 59 60 61 62 63	8 8 4
Const. 10^3 Gals.	64 65 66 67 68 69	1 0 1
Small Engines 10^3 Gals.	70 71 72 73 74 75 76	1 6 6 4
	77	
Action	78	A
	79	A
cd	80	4

Cutback Asphalt tons	10 11 12 13 14 15 16	5 5 4
Nat. Gas Leaks 10^3 lbs.	17 18 19 20 21	3 2 7 0
Dry Cleaning Solvent 10^2 lbs.	22 23 24 25 26	1 2 0 5 1
Pesticide Use 10^2 lbs.	27 28 29 30 31	1 6 1 1 2
FOREST FIRES Area - Acres	32 33 34 35 36 37 38	1
Quant. ton/acre	39 40 41	1 1
AGRICULTURAL & MISC. BURNING Area - Acres	42 43 44 45 46 47	5 2 0
Quant. tons/acre	48 49 50	1
INDUSTRIAL EQUIPMENT Gas 10^3 Gals.	51 52 53 54	9 9 2
	55 56 57	1
Structure Fires #/year	58 59 60 61	1 0 6 2
PRESCRIBED BURNING Area-Acres	62 63 64 65 66 67	4
Quant. tons/acre	68 69 70	7 0
	71 72 73 74 75 76 77	
Action	78	A
	79	A
cd	80	5

COMMENTS	10–77	B U C K S C O U N T Y 1 9 8 7
Action	78	A
	79	A
cd	80	6

EPA (DUR) 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ________

Name of Person Completing Form ________

State	1 2	3 1
County	3 4 5 6	0 6 4 0
AQCR	7 8 9	0 4 5

Year of Record	10 11	8 7
EMISSION ESTIMATES (10² tons) Particulate	12 13 14 15 16	
SO₂	17 18 19 20 21	
NOₓ	22 23 24 25	
HC	26 27 28 29 30	
CO	31 32 33 34 35	
SULFUR CONTENT (%) Anth. Coal	36 37	0▲6
Bitum. Coal	38 39	0▲7
Dist. Oil	40 41	0▲2
Resid Oil	42 43	0▲3
ASH CONTENT (%) Anth. Coal	44 45 46	0 3▲7
Bitum. Coal	47 48 49	0 7▲5
RESIDENTIAL FUEL Anth. 10² tons	50 51 52 53	4 5
Bitumin. 10¹ tons	54 55 56 57 58	
Dist. Oil 10⁴ Gal.	59 60 61 62 63	5 2 0 0
Resid. Oil 10⁴ Gal.	64 65 66 67 68	
Nat. Gas 10⁷ ft.³	69 70 71 72 73	7 6 0
Wood 10⁷ tons	74 75 76 77	7
Action	78	A
	79	A
	80	1

COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10¹ tons	10 11 12 13 14	
Bitumin. 10¹ tons	15 16 17 18 19	
Dist. Oil 10⁴ Gals.	20 21 22 23 24	2 5 6 8
Resid. Oil 10⁴ Gals.	25 26 27 28 29	1 9 5 0
Nat. Gas 10⁷ Ft³	30 31 32 33	2 2 0
Wood 10² tons	34 35	
INDUSTRIAL FUEL Anth. Coal 10¹ tons	36 37 38 39 40 41	
Bitum. Coal 10¹ tons	42 43 44 45 46 47	3 3 9
Coke 10¹ tons	48 49 50 51	
Dist. Oil 10⁴ Gals.	52 53 54 55 56	
Resid. Oil 10⁴ Gals.	57 58 59 60 61	
Nat. Gas 10⁷ Ft.³	62 63 64 65 66	
OFF HIWAY DIESEL Farm 10³ Gals.	67 68 69	4 6
Const. 10⁴ Gals.	70 71 72 73	8 3
	74 75 76 77	
Action	78	A
	79	A
cd	80	2

ON SITE INCINERATION Comm. Inst. 10² tons	10 11 12 13 14 15	5 7
SURFACE COATING Archi-tectural 10² lbs.	16 17 18 19 20	1 7 8 6 0
Auto Refinish. tons	21 22 23 24	4 7 3
Industrial 10² lbs.	25 26 27 28 29 30	7 1 7 8 5
DEGREASING Cold Cleaning 10² lbs.	31 32 33 34 35 36	1 5 5 3 0
O.T. Vapor & Conveyorized 10² lbs.	37 38 39 40 41 42	9 2 9 0
Comm./Cons. Solvent 10² lbs.	43 44 45 46 47 48 49	3 8 8 2 6
Graphic Arts 10² lbs.	50 51 52 53 54	3 1 0 6
Small Processes tons	55 56 57 58 59	1 9 6 5
DIESEL FUEL Industrial Equip. 10³ Gals.	60 61 62 63 64	1 2 8 4
	65 66 67	
Rail Locomotive 10⁴ Gals.	68 69 70 71 72	2 5 6
County Population 10³	73 74 75 76	
Density Class	77	
Action	78	A
	79	A
cd	80	3

AIRCRAFT Military LTO CYC 10¹	10 11 12 13	4 1 8 7
Civil LTO CYC 10¹	14 15 16 17 18	1 7 3 0 8
Commercial LTO CYC 10¹	19 20 21 22 23	7 5 3
VESSELS Anth. Coal 10¹ tons	24 25 26 27	
Diesel Oil 10⁴ Gals.	28 29 30 31	3 3
Resid. Oil 10⁴ Gals.	32 33 34 35 36	3 2 9
Gasoline 10³ Gals.	37 38 39 40	3 3 9
GASOLINE MARKETING Stage I 10⁴ Gals.	41 42 43 44 45 46	1 3 7 1 7
Stage II 10⁴ Gals.	47 48 49 50 51	1 3 7 1 7
Other 10⁴ Gals.	52 53 54 55 56 57	1 3 7 1 7
OFF HIWAY GASOLINE Farm 10³ Gals.	58 59 60 61 62 63	6 9 4
Const. 10³ Gals.	64 65 66 67 68 69	6 2
Small Engines 10³ Gals.	70 71 72 73 74 75 76	1 2 2 7
	77	
Action	78	A
	79	A
cd	80	4

Cutback Asphalt tons	10 11 12 13 14 15 16	1 0 9 0
Nat. Gas Leaks 10³ lbs.	17 18 19 20 21	2 6 6 5
Dry Cleaning Solvent 10² lbs.	22 23 24 25 26	5 2 4 1
Pesticide Use 10² lbs.	27 28 29 30 31	3 0 3 7 2
FOREST FIRES Area - Acres	32 33 34 35 36 37 38	3 5 9 5
Quant. ton/acre	39 40 41	1 1
AGRICULTURAL & MISC. BURNING Area - Acres	42 43 44 45 46 47	3 8 8
Quant. tons/acre	48 49 50	1
INDUSTRIAL EQUIPMENT Gas 10³ Gals.	51 52 53 54	4 6 9
	55 56 57	1
Structure Fires #/year	58 59 60 61	1 4 5 9
PRESCRIBED BURNING Area-Acres	62 63 64 65 66 67	4 3 7 0 0
Quant. tons/acre	68 69 70	1
	71 72 73 74 75 76 77	
Action	78	A
	79	A
cd	80	5

COMMENTS	10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	B U R L I N G T O N C O U N T Y 1 9 8 7
	32 … 77	
Action	78	A
	79	A
cd	80	6

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ________

Name of Person Completing Form ________

State (1-2)	County (3-6)	AQCR (7-9)
31	0740	045

Year of Record (10-11)	EMISSION ESTIMATES (10^2 tons) Particulate (12-16)	SO$_2$ (17-21)	NO$_x$ (22-25)	HC (26-30)	CO (31-35)	SULFUR CONTENT (%) Anth. Coal (36-37)	Bitum. Coal (38-39)	Dist. Oil (40-41)	Resid Oil (42-43)	ASH CONTENT (%) Anth. Coal (44-46)	Bitum. Coal (47-49)	RESIDENTIAL FUEL Anth. 10^2 tons (50-53)	Bitumin. 10^1 tons (54-58)	Dist. Oil 10^4 Gal. (59-63)	Resid. Oil 10^4 Gal. (64-68)	Nat. Gas 10^7 ft.^{3} (69-73)	Wood 10^2 tons (74-77)	Action (78)	79	cd (80)
87						0.6	2.1	0.2	0.3	09.0	10.4	69		9440		1820	2	A	A	1

COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10^1 tons (10-14)	Bitumin. 10^1 tons (15-19)	Dist. Oil 10^4 Gals. (20-24)	Resid. Oil 10^4 Gals. (25-29)	Nat. Gas 10^7 Ft^3 (30-33)	Wood 10^2 tons (34-35)	INDUSTRIAL FUEL Anth. Coal 10^1 tons (36-41)	Bitum. Coal 10^1 tons (42-47)	Coke 10^1 tons (48-51)	Dist. Oil 10^4 Gals. (52-56)	Resid. Oil 10^4 Gals. (57-61)	Nat. Gas 10^7 Ft.^{3} (62-66)	OFF HIWAY DIESEL Farm 10^3 Gals. (67-69)	Const. 10^4 Gals. (70-73)	74-77	Action (78)	79	cd (80)
		5926	4278	400			611				280	4	272		A	A	2

ON SITE INCINERATION Comm. Inst. 10^2 tons (10-15)	SURFACE COATING Architectural 10^2 lbs. (16-20)	Auto Refinish. tons (21-24)	Industrial 10^2 lbs. (25-30)	DEGREASING Cold Cleaning 10^2 lbs. (31-36)	O.T. Vapor & Conveyorized 10^2 lbs. (37-42)	Comm./Cons. Solvent 10^2 lbs. (43-49)	Graphic Arts 10^2 lbs. (50-54)	Small Processes tons (55-59)	Industrial Equip. 10^3 Gals. (60-64)	DIESEL FUEL (65-67)	Rail Locomotive 10^4 Gals. (68-72)	County Population 10^3 (73-76)	Density Class (77)	Action (78)	79	cd (80)
100	24590	828	41060	21333	11196	53457	4277	944	2015		392			A	A	3

AIRCRAFT Military LTO CYC 10^1 (10-13)	Civil LTO CYC 10^1 (14-18)	Commercial LTO CYC 10^1 (19-23)	VESSELS Anth. Coal 10^1 tons (24-27)	Diesel Oil 10^4 Gals. (28-31)	Resid. Oil 10^4 Gals. (32-36)	Gasoline 10^3 Gals. (37-40)	GASOLINE MARKETING Stage I 10^4 Gals. (41-46)	Stage II 10^4 Gals. (47-51)	Other 10^4 Gals. (52-57)	OFF HIWAY GASOLINE Farm 10^3 Gals. (58-63)	Const. 10^3 Gals. (64-69)	Small Engines 10^3 Gals. (70-76)	77	Action (78)	79	cd (80)
				78	764	71	18572	18572	18572	58	205	1723		A	A	4

Cutback Asphalt tons (10-16)	Nat. Gas Leaks 10^1 lbs. (17-21)	Dry Cleaning Solvent 10^2 lbs. (22-26)	Pesticide Use 10^2 lbs. (27-31)	FOREST FIRES Area - Acres (32-38)	Quant. ton/acre (39-41)	AGRICULTURAL & MISC. BURNING Area - Acres (42-47)	Quant. tons/acre (48-50)	INDUSTRIAL EQUIPMENT Gas 10^3 Gals. (51-54)	55-57	Structure Fires #/year (58-61)	PRESCRIBED BURNING Area-Acres (62-67)	Quant. tons/acre (68-70)	71-77	Action (78)	79	cd (80)
919	5423	7217	12867	1826	1	98	1	736	1	1028	0	0		A	A	5

COMMENTS (10-77)	Action (78)	79	cd (80)
CAMDEN COUNTY 1987	A	A	6

EPA (DUR) 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ________

Name of Person Completing Form ________

State		County				AQCR		
1	2	3	4	5	6	7	8	9
3	9	1	6	6	0	0	4	5

Year of Record	EMISSION ESTIMATES (10^2 tons) Particulate	SO$_2$	NO$_x$	HC	CO	SULFUR CONTENT (%) Anth. Coal	Bitum. Coal	Dist. Oil	Resid Oil	ASH CONTENT (%) Anth. Coal	Bitum. Coal	RESIDENTIAL FUEL Anth. 10^2 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gal.	Resid. Oil 10^4 Gal.	Nat. Gas 10^7 ft.^{3}	Wood 10^2 tons	Action		cd
10 11	12 13 14 15 16	17 18 19 20 21	22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37	38 39	40 41	42 43	44 45 46	47 48 49	50 51 52 53	54 55 56 57 58	59 60 61 62 63	64 65 66 67 68	69 70 71 72 73	74 75 76 77	78	79	80
87						0▲7	3▲0	0▲3	1▲0	12▲6	11▲2	37		7230		434	6	A	A	1

COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10^1 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Wood 10^2 tons	INDUSTRIAL FUEL Anth. Coal 10^1 tons	Bitum. Coal 10^1 tons	Coke 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft.^{3}	OFF HIWAY DIESEL Farm 10^3 Gals.	Const. 10^4 Gals.		Action		cd
10 11 12 13 14	15 16 17 18 19	20 21 22 23 24	25 26 27 28 29	30 31 32 33	34 35	36 37 38 39 40 41	42 43 44 45 46 47	48 49 50 51	52 53 54 55 56	57 58 59 60 61	62 63 64 65 66	67 68 69	70 71 72 73	74 75 76 77	78	79	80
		928	1634	178					365	1702	318	226	94		A	A	2

ON SITE INCINERATION Comm. Inst. 10^2 tons	SURFACE COATING Architectural 10^2 lbs.	Auto Refinish. tons	Industrial 10^2 lbs.	DEGREASING Cold Cleaning 10^2 lbs.	O.T. Vapor & Conveyorized 10^2 lbs.	Comm./Cons. Solvent 10^2 lbs.	Graphic Arts 10^2 lbs.	Small Processes tons	Industrial Equip. 10^3 Gals.	DIESEL FUEL	Rail Locomotive 10^4 Gals.	County Population 10^3	Dummy Card	Action		cd
10 11 12 13 14 15	16 17 18 19 20	21 22 23 24	25 26 27 28 29 30	31 32 33 34 35 36	37 38 39 40 41 42	43 44 45 46 47 48 49	50 51 52 53 54	55 56 57 58 59	60 61 62 63 64	65 66 67	68 69 70 71 72	73 74 75 76	77	78	79	80
0	14284	478	54863	12421	13493	31052	447	444	2003		393			A	A	3

AIRCRAFT Military LTO CYC 10^1	Civil LTO CYC 10^1	Commercial LTO CYC 10^1	VESSELS Anth. Coal 10^1 tons	Diesel Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Gasoline 10^3 Gals.	GASOLINE MARKETING Stage I 10^4 Gals.	Stage II 10^4 Gals.	Other 10^4 Gals.	OFF HIWAY GASOLINE Farm 10^3 Gals.	Const. 10^3 Gals.	Small Engines 10^3 Gals.		Action		cd
10 11 12 13	14 15 16 17 18	19 20 21 22 23	24 25 26 27	28 29 30 31	32 33 34 35 36	37 38 39 40	41 42 43 44 45 46	47 48 49 50 51	52 53 54 55 56 57	58 59 60 61 62 63	64 65 66 67 68 69	70 71 72 73 74 75 76	77	78	79	80
10	9635	359				251	8488	8484	8484	1899	71	932		A	A	4

Cutback Asphalt tons	Nat. Gas Leaks 10^3 lbs.	Dry Cleaning Solvent 10^2 lbs.	Pesticide Use 10^2 lbs.	FOREST FIRES Area - Acres	Quant. ton/acre	AGRICULTURAL & MISC. BURNING Area - Acres	Quant. tons/acre	INDUSTRIAL EQUIPMENT Gas 10^3 Gals.		Structure Fires #/year	PRESCRIBED BURNING Area-Acres	Quant. Tons/acre		Action		cd
10 11 12 13 14 15 16	17 18 19 20 21	22 23 24 25 26	27 28 29 30 31	32 33 34 35 36 37 38	39 40 41	42 43 44 45 46 47	48 49 50	51 52 53 54	55 56 57	58 59 60 61	62 63 64 65 66 67	68 69 70	71 72 73 74 75 76 77	78	79	80
457	2564	7452	29654	27	11	763	1	732	1	3581	28	70		A	A	5

COMMENTS																						Action		cd
10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29–77			78	79	80
C	H	E	S	T	E	R		C	O	U	N	T	Y		1	9	8	7				A	A	6

EPA [illegible] 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ______

Name of Person Completing Form ______

State	1–2	39
County	3–6	2360
AQCR	7–9	045

Year of Record	10–11	87
EMISSION ESTIMATES (10² tons) – Particulate	12–16	
EMISSION ESTIMATES (10² tons) – SO$_2$	17–21	
EMISSION ESTIMATES (10² tons) – NO$_x$	22–25	
EMISSION ESTIMATES (10² tons) – HC	26–30	
EMISSION ESTIMATES (10² tons) – CO	31–35	
SULFUR CONTENT (%) – Anth. Coal	36–37	0▲7
SULFUR CONTENT (%) – Bitum. Coal	38–39	3▲0
SULFUR CONTENT (%) – Dist. Oil	40–41	0▲3
SULFUR CONTENT (%) – Resid Oil	42–43	1▲0
ASH CONTENT (%) – Anth. Coal	44–46	12▲6
ASH CONTENT (%) – Bitum. Coal	47–49	11▲2
RESIDENTIAL FUEL – Anth. 10² tons	50–53	32
RESIDENTIAL FUEL – Bitumin. 10¹ tons	54–58	
RESIDENTIAL FUEL – Dist. Oil 10⁴ Gal.	59–63	11728
RESIDENTIAL FUEL – Resid. Oil 10⁴ Gal.	64–68	
RESIDENTIAL FUEL – Nat. Gas 10⁷ ft.³	69–73	872
RESIDENTIAL FUEL – Wood 10⁷ tons	74–77	5
Action	78	A
	79	A
cd	80	1

COMMERCIAL AND INSTITUTIONAL FUEL – Anth. 10¹ tons	10–14	
COMMERCIAL AND INSTITUTIONAL FUEL – Bitumin. 10¹ tons	15–19	
COMMERCIAL AND INSTITUTIONAL FUEL – Dist. Oil 10⁴ Gals.	20–24	2362
COMMERCIAL AND INSTITUTIONAL FUEL – Resid. Oil 10⁴ Gals.	25–29	3408
COMMERCIAL AND INSTITUTIONAL FUEL – Nat. Gas 10⁷ Ft³	30–33	434
COMMERCIAL AND INSTITUTIONAL FUEL – Wood 10² tons	34–35	
INDUSTRIAL FUEL – Anth. Coal 10¹ tons	36–41	
INDUSTRIAL FUEL – Bitum. Coal 10¹ tons	42–47	
INDUSTRIAL FUEL – Coke 10¹ tons	48–51	
INDUSTRIAL FUEL – Dist. Oil 10⁴ Gals.	52–56	596
INDUSTRIAL FUEL – Resid. Oil 10⁴ Gals.	57–61	2345
INDUSTRIAL FUEL – Nat. Gas 10⁷ Ft.³	62–66	484
OFF HIWAY DIESEL – Farm 10³ Gals.	67–69	8
OFF HIWAY DIESEL – Const. 10⁴ Gals.	70–73	230
	74–77	
Action	78	A
	79	A
cd	80	2

ON SITE INCINERATION – Comm. Inst. 10² tons	10–15	0
SURFACE COATING – Architectural 10² lbs.	16–20	29285
SURFACE COATING – Auto Refinish. tons	21–24	924
SURFACE COATING – Industrial 10² lbs.	25–30	21019
DEGREASING – Cold Cleaning 10² lbs.	31–36	25465
DEGREASING – O.T. Vapor & Conveyorized 10² lbs.	37–42	17473
Comm./Cons. Solvent 10² lbs.	43–49	63663
Graphic Arts 10² lbs.	50–54	5093
Small Processes tons	55–59	467
DIESEL FUEL – Industrial Equip. 10³ Gals.	60–64	2111
DIESEL FUEL	65–67	
DIESEL FUEL – Rail Locomotive 10⁴ Gals.	68–72	837
County Population 10³	73–76	
County Code	77	
Action	78	A
	79	A
cd	80	3

AIRCRAFT – Military LTO CYC 10¹	10–13	14
AIRCRAFT – Civil LTO CYC 10¹	14–18	1240
AIRCRAFT – Commercial LTO CYC 10¹	19–23	4150
VESSELS – Anth. Coal 10¹ tons	24–27	
VESSELS – Diesel Oil 10⁴ Gals.	28–31	53
VESSELS – Resid. Oil 10⁴ Gals.	32–36	504
VESSELS – Gasoline 10³ Gals.	37–40	338
GASOLINE MARKETING – Stage I 10⁴ Gals.	41–46	18922
GASOLINE MARKETING – Stage II 10⁴ Gals.	47–51	18922
GASOLINE MARKETING – Other 10⁴ Gals.	52–57	18922
OFF HIWAY GASOLINE – Farm 10³ Gals.	58–63	67
OFF HIWAY GASOLINE – Const. 10³ Gals.	64–69	173
OFF HIWAY GASOLINE – Small Engines 10³ Gals.	70–76	2020
	77	
Action	78	A
	79	A
cd	80	4

Cutback Asphalt tons	10–16	345
Nat. Gas Leaks 10³ lbs.	17–21	4894
Dry Cleaning Solvent 10² lbs.	22–26	15279
Pesticide Use 10² lbs.	27–31	1077
FOREST FIRES – Area - Acres	32–38	7
FOREST FIRES – Quant. ton/acre	39–41	11
AGRICULTURAL & MISC. BURNING – Area Acres	42–47	51
AGRICULTURAL & MISC. BURNING – Quant. tons/acre	48–50	1
INDUSTRIAL EQUIPMENT – Gas 10³ Gals.	51–54	771
	55–57	1
Structure Fires #/year	58–61	3046
PRESCRIBED BURNING – Area-Acres	62–67	4
PRESCRIBED BURNING – Quant. tons/acre	68–70	70
	71–77	
Action	78	A
	79	A
cd	80	5

COMMENTS	10–77	DELAWARE COUNTY 1987
Action	78	A
	79	A
cd	80	6

EPA [illegible] 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ________

Name of Person Completing Form ________

State 1	State 2	County 3	County 4	County 5	County 6	AQCR 7	AQCR 8	AQCR 9
3	1	1	7	0	0	0	4	5

Year of Record (10–11)	8 7
EMISSION ESTIMATES (10^2 tons): Particulate (12–16)	
SO$_2$ (17–21)	
NO$_x$ (22–25)	
HC (26–30)	
CO (31–35)	
SULFUR CONTENT (%): Anth. Coal (36–37)	0▲6
Bitum. Coal (38–39)	2▲1
Dist. Oil (40–41)	0▲3
Resid Oil (42–43)	0▲2
ASH CONTENT (%): Anth. Coal (44–46)	09▲0
Bitum. Coal (47–49)	10▲4
RESIDENTIAL FUEL: Anth. 10^2 tons (50–53)	2 0
Bitumin. 10^1 tons (54–58)	
Dist. Oil 10^4 Gal. (59–63)	4 0 0 0
Resid. Oil 10^4 Gal. (64–68)	
Nat. Gas 10^7 ft^3 (69–73)	4 0 0
Wood 10^2 tons (74–77)	
Action (78)	A
79	A
cd (80)	1

COMMERCIAL AND INSTITUTIONAL FUEL: Anth. 10^1 tons (10–14)	
Bitumin. 10^1 tons (15–19)	
Dist. Oil 10^4 Gals. (20–24)	1 2 9 6
Resid. Oil 10^4 Gals. (25–29)	9 8 0
Nat. Gas 10^7 Ft^3 (30–33)	
Wood 10^7 tons (34–35)	
INDUSTRIAL FUEL: Anth. Coal 10^1 tons (36–41)	
Bitum. Coal 10^1 tons (42–47)	2 2 4
Coke 10^1 tons (48–51)	
Dist. Oil 10^4 Gals. (52–56)	
Resid. Oil 10^4 Gals. (57–61)	
Nat. Gas 10^7 Ft^3 (62–66)	
OFF HIWAY DIESEL: Farm 10^3 Gals. (67–69)	3 4
Const. 10^4 Gals. (70–73)	2 2
74–77	
Action (78)	A
79	A
cd (80)	2

ON SITE INCINERATION: Comm. Inst. 10^2 tons (10–15)	2 8
SURFACE COATING: Architectural 10^2 lbs. (16–20)	1 0 3 6 8
Auto Refinish. tons (21–24)	2 4 2
Industrial 10^2 lbs. (25–30)	5 5 8 0
DEGREASING: Cold Cleaning 10^2 lbs. (31–36)	9 0 1 5
O.T. Vapor & Conveyorized 10^2 lbs. (37–42)	4 4 9 6
Comm./Cons. Solvent 10^2 lbs. (43–49)	2 2 5 3 8
Graphic Arts 10^2 lbs. (50–54)	1 8 0 3
Small Processes tons (55–59)	2 8 1
Industrial Equip. 10^3 Gals. (60–64)	7 8 1
DIESEL FUEL (65–67)	
Rail Locomotive 10^4 Gals. (68–72)	1 5 2
County Population 10^3 (73–76)	
Dummy Col (77)	
Action (78)	A
79	A
cd (80)	3

AIRCRAFT: Military LTO CYC 10^1 (10–13)	1 7
Civil LTO CYC 10^1 (14–18)	1 2 9 3 2
Commercial LTO CYC 10^1 (19–23)	5 8 4 9
VESSELS: Anth. Coal 10^1 tons (24–27)	
Diesel Oil 10^4 Gals. (28–31)	8 6
Resid. Oil 10^4 Gals. (32–36)	8 2 0
Gasoline 10^3 Gals. (37–40)	9 6
GASOLINE MARKETING: Stage I 10^4 Gals. (41–46)	6 8 8 8
Stage II 10^4 Gals. (47–51)	6 8 8 8
Other 10^4 Gals. (52–57)	6 8 8 8
OFF HIWAY GASOLINE: Farm 10^3 Gals. (58–63)	5 1 2
Const. 10^3 Gals. (64–69)	1 7
Small Engines 10^3 Gals. (70–76)	6 6 0
77	
Action (78)	A
79	A
cd (80)	4

Cutback Asphalt tons (10–16)	6 8 1
Nat. Gas Leaks 10^3 lbs. (17–21)	1 0 8 5
Dry Cleaning Solvent 10^2 lbs. (22–26)	3 0 4 3
Pesticide Use 10^2 lbs. (27–31)	4 7 1 9 2
FOREST FIRES: Area - Acres (32–38)	8 1 3
Quant. ton/acre (39–41)	1 1
AGRICULTURAL & MISC. BURNING: Area - Acres (42–47)	5 0 4
Quant. tons/acre (48–50)	1
INDUSTRIAL EQUIPMENT: Gas 10^3 Gals. (51–54)	2 8 9
55–57	1
Structure Fires #/year (58–61)	2 3 5
PRESCRIBED BURNING: Area-Acres (62–67)	0
Quant. tons/acre (68–70)	0
71–77	
Action (78)	A
79	A
cd (80)	5

COMMENTS (10–77)	G L O U C E S T E R C O U N T Y 1 9 8 7
Action (78)	A
79	A
cd (80)	8

EPA (DUR) 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ________

Name of Person Completing Form ________

State (1–2)	County (3–6)	AQCR (7–9)
31	2980	045

Year of Record (10–11)	EMISSION ESTIMATES (10^2 tons) Particulate (12–16)	SO_2 (17–21)	NO_x (22–25)	HC (26–30)	CO (31–35)	SULFUR CONTENT (%) Anth. Coal (36–37)	Bitum. Coal (38–39)	Dist. Oil (40–41)	Resid. Oil (42–43)	ASH CONTENT (%) Anth. Coal (44–46)	Bitum. Coal (47–49)	RESIDENTIAL FUEL Anth. 10^2 tons (50–53)	Bitumin. 10^1 tons (54–58)	Dist. Oil 10^4 Gal. (59–63)	Resid. Oil 10^4 Gal. (64–68)	Nat. Gas 10^7 ft.^{3} (69–73)	Wood 10^2 tons (74–77)	Action (78)	(79)	cd (80)
87						0.6	1.8	0.2	0.5	09.0	13.6	42		6560		800	2	A	A	1

COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10^1 tons (10–14)	Bitumin. 10^1 tons (15–19)	Dist. Oil 10^4 Gals. (20–24)	Resid. Oil 10^4 Gals. (25–29)	Nat. Gas 10^7 Ft^3 (30–33)	Wood 10^2 tons (34–35)	INDUSTRIAL FUEL Anth. Coal 10^1 tons (36–41)	Bitum. Coal 10^1 tons (42–47)	Coke 10^1 tons (48–51)	Dist. Oil 10^4 Gals. (52–56)	Resid. Oil 10^4 Gals. (57–61)	Nat. Gas 10^7 Ft.^{3} (62–66)	OFF HIWAY DIESEL Farm 10^3 Gals. (67–69)	Const. 10^4 Gals. (70–73)	(74–77)	Action (78)	(79)	cd (80)
		5500	4271	360			699			1666	320	18	34		A	A	2

ON SITE INCINERATION Comm. Inst. 10^3 tons (10–15)	SURFACE COATING Architectural 10^2 lbs. (16–20)	Auto Refinish. tons (21–24)	Industrial 10^2 lbs. (25–30)	DEGREASING Cold Cleaning 10^2 lbs. (31–36)	O.T. Vapor & Conveyorized 10^2 lbs. (37–42)	Comm./Cons. Solvent 10^2 lbs. (43–49)	Graphic Arts 10^2 lbs. (50–54)	Small Processes tons (55–59)	DIESEL FUEL Industrial Equip. 10^3 Gals. (60–64)	(65–67)	Rail Locomotive 10^4 Gals. (68–72)	County Population 10^3 (73–76)	(77)	Action (78)	(79)	cd (80)
6 6	16172	462	74661	14062	11895	35156	2012	2164	1665		248			A	A	3

AIRCRAFT Military LTO CYC 10^1 (10–13)	Civil LTO CYC 10^1 (14–18)	Commercial LTO CYC 10^1 (19–23)	VESSELS Anth. Coal 10^1 tons (24–27)	Diesel Oil 10^4 Gals. (28–31)	Resid. Oil 10^4 Gals. (32–36)	Gasoline 10^3 Gals. (37–40)	GASOLINE MARKETING Stage I 10^4 Gals. (41–46)	Stage II 10^4 Gals. (47–51)	Other 10^4 Gals. (52–57)	OFF HIWAY GASOLINE Farm 10^3 Gals. (58–63)	Const. 10^3 Gals. (64–69)	Small Engines 10^3 Gals. (70–76)	(77)	Action (78)	(79)	cd (80)
	14175	610		1	10	93	12700	12700	12700	271	26	1120		A	A	4

Cutback Asphalt tons (10–16)	Nat. Gas Leaks 10^3 lbs. (17–21)	Dry Cleaning Solvent 10^2 lbs. (22–26)	Pesticide Use 10^2 lbs. (27–31)	FOREST FIRES Area Acres (32–38)	Quant. ton/acre (39–41)	AGRICULTURAL & MISC. BURNING Area Acres (42–47)	Quant. tons/acre (48–50)	INDUSTRIAL EQUIPMENT Gas 10^3 Gals. (51–54)	(55–57)	Structure Fires #/year (58–61)	PRESCRIBED BURNING Area-Acres (62–67)	Quant. tons/acre (68–70)	(71–77)	Action (78)	(79)	cd (80)
630	4011	4746	8991	0	0	129	1	608	1	456	0	0		A	A	5

COMMENTS (10–77)	Action (78)	(79)	cd (80)
MERCER COUNTY 1987	A	A	6

EPA (DUR) 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ____________

Name of Person Completing Form ____________________________

	State	County	AQCR
Columns	1–2	3–6	7–9
Entry	39	6000	045

	Year of Record	EMISSION ESTIMATES (10^2 tons) Particulate	SO_2	NO_x	HC	CO	SULFUR CONTENT (%) Anth. Coal	Bitum. Coal	Dist. Oil	Resid Oil	ASH CONTENT (%) Anth. Coal	Bitum. Coal	RESIDENTIAL FUEL Anth. 10^2 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gal.	Resid. Oil 10^4 Gal.	Nat. Gas 10^7 ft.^{3}	Wood 10^2 tons	Action		cd
Columns	10–11	12–16	17–21	22–26	26–30	31–36	36–37	38–39	40–41	42–43	44–46	47–49	50–53	54–58	59–63	64–68	69–73	74–77	78	79	80
Entry	87						0▲7	3▲0	0▲3	1▲0	12▲6	11▲2	73		14174		964	4	A	A	1

	COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10^1 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Wood 10^2 tons	INDUSTRIAL FUEL Anth. Coal 10^1 tons	Bitum. Coal 10^1 tons	Coke 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft.^{3}	OFF HIWAY DIESEL Farm 10^3 Gals.	Const. 10^4 Gals.		Action		cd
Columns	10–14	15–19	20–24	25–29	30–33	34–35	36–41	42–47	48–51	52–56	57–61	62–66	67–69	70–73	74–77	78	79	80
Entry	1086	127	3962	4595	700			3720			4753	931	85	466		A	A	7

	ON SITE INCINERATION Comm. Inst. 10^2 tons	SURFACE COATING Architectural 10^2 lbs.	Auto Refinish. tons	Industrial 10^2 lbs.	DEGREASING Cold Cleaning 10^2 lbs.	O.T. Vapor & Conveyorized 10^2 lbs.	Comm./Cons. Solvent 10^2 lbs.	Graphic Arts 10^2 lbs.	Small Processes tons	Industrial Equip. 10^3 Gals.	DIESEL FUEL	Rail Locomotive 10^4 Gals.	County Population 10^3	Degree Days	Action		cd
Columns	10–15	16–20	21–24	25–30	31–36	37–42	43–49	50–54	55–59	60–64	65–67	68–72	73–76	77	78	79	80
Entry	0	32890	1212	169854	28600	40142	71499	5720	2561	5607		775			A	A	3

	AIRCRAFT Military LTO CYC 10^1	Civil LTO CYC 10^1	Commercial LTO CYC 10^1	VESSELS Anth. Coal 10^1 tons	Diesel Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Gasoline 10^3 Gals.	GASOLINE MARKETING Stage I 10^4 Gals.	Stage II 10^4 Gals.	Other 10^4 Gals.	OFF HIWAY GASOLINE Farm 10^3 Gals.	Const. 10^3 Gals.	Small Engines 10^3 Gals.		Action		cd
Columns	10–13	14–18	19–23	24–27	28–31	32–36	37–40	41–46	47–51	52–57	58–63	64–69	70–76	77	78	79	80
Entry	55	22806	2020				638	29482	29482	29482	724	351	2054		A	A	4

	Cutback Asphalt tons	Nat. Gas Leaks 10^3 lbs.	Dry Cleaning Solvent 10^2 lbs.	Pesticide Use 10^2 lbs.	FOREST FIRES Area - Acres	Quant. ton/acre	AGRICULTURAL & MISC. BURNING Area Acres	Quant. tons/acre	INDUSTRIAL EQUIPMENT Gas 10^3 Gals.		Structure Fires #/year	PRESCRIBED BURNING Area-Acres	Quant. tons/acre		Action		cd
Columns	10–16	17–21	22–26	27–31	32–38	39–41	42–47	48–50	51–54	55–57	58–61	62–67	68–70	71–77	78	79	80
Entry	570	7076	17160	9319	7	11	297	1	2011	1	4082	4	70		A	A	5

	COMMENTS	Action		cd
Columns	10–77	78	79	80
Entry	MONTGOMERY COUNTY 1987	A	A	6

EPA (I (0) 21-

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ________

Name of Person Completing Form ________

State	1–2	08
County	3–6	0180
AQCR	7–9	045

Year of Record	10–11	87
EMISSION ESTIMATES (10^2 tons) Particulate	12–16	
SO_2	17–21	
NO_x	22–25	
HC	26–30	
CO	31–35	
SULFUR CONTENT (%) Anth. Coal	36–37	0▲7
Bitum. Coal	38–39	1▲0
Dist. Oil	40–41	0▲3
Resid. Oil	42–43	1▲0
ASH CONTENT (%) Anth. Coal	44–46	09▲0
Bitum. Coal	47–49	▲
RESIDENTIAL FUEL Anth. 10^2 tons	50–53	18
Bitumin. 10^1 tons	54–58	
Dist. Oil 10^4 Gal.	59–63	4996
Resid. Oil 10^4 Gal.	64–68	
Nat. Gas 10^7 ft.^{3}	69–73	795
Wood 10^2 tons	74–77	23
Action	78	A
	79	A
cd	80	1

COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10^1 tons	10–14	52
Bitumin. 10^1 tons	15–19	
Dist. Oil 10^4 Gals.	20–24	3542
Resid. Oil 10^4 Gals.	25–29	612
Nat. Gas 10^7 Ft^3	30–33	256
Wood 10^2 tons	34–35	
INDUSTRIAL FUEL Anth. Coal 10^1 tons	36–41	
Bitum. Coal 10^1 tons	42–47	
Coke 10^1 tons	48–51	
Dist. Oil 10^4 Gals.	52–56	
Resid. Oil 10^4 Gals.	57–61	
Nat. Gas 10^7 Ft.^{3}	62–66	233
OFF HIWAY DIESEL Farm 10^3 Gals.	67–69	67
Const. 10^4 Gals.	70–73	264
	74–77	
Action	78	A
	79	A
cd	80	2

ON SITE INCINERATION Comm. Inst. 10^2 tons	10–15	0
SURFACE COATING Architectural 10^2 lbs.	16–20	19384
Auto Refinish. tons	21–24	789
Industrial 10^2 lbs.	25–30	51828
DEGREASING Cold Cleaning 10^2 lbs.	31–36	17290
O.T. Vapor & Conveyorized 10^2 lbs.	37–42	9556
Comm./Cons. Solvent 10^2 lbs.	43–49	43226
Graphic Arts 10^2 lbs.	50–54	3851
Small Processes tons	55–59	2884
DIESEL FUEL Industrial Equip. 10^3 Gals.	60–64	1828
	65–67	
Rail Locomotive 10^4 Gals.	68–72	70
County Population 10^3	73–76	
Dummy Card	77	
Action	78	A
	79	A
cd	80	3

AIRCRAFT Military LTO CYC 10^1	10–13	
Civil LTO CYC 10^1	14–18	4542
Commercial LTO CYC 10^1	19–23	14772
VESSELS Anth. Coal 10^1 tons	24–27	
Diesel Oil 10^4 Gals.	28–31	164
Resid. Oil 10^4 Gals.	32–36	1689
Gasoline 10^3 Gals.	37–40	1146
GASOLINE MARKETING Stage I 10^4 Gals.	41–46	16008
Stage II 10^4 Gals.	47–51	16008
Other 10^4 Gals.	52–57	16008
OFF HIWAY GASOLINE Farm 10^3 Gals.	58–63	632
Const. 10^3 Gals.	64–69	199
Small Engines 10^3 Gals.	70–76	1230
	77	
Action	78	A
	79	A
cd	80	4

Cutback Asphalt tons	10–16	253
Nat. Gas Leaks 10^3 lbs.	17–21	3488
Dry Cleaning Solvent 10^2 lbs.	22–26	10188
Pesticide Use 10^2 lbs.	27–31	13223
FOREST FIRES Area - Acres	32–38	42
Quant. tons/acre	39–41	11
AGRICULTURAL & MISC. BURNING Area - Acres	42–47	79
Quant. tons/acre	48–50	1
INDUSTRIAL EQUIPMENT Gas 10^3 Gals.	51–54	668
	55–57	1
Structure Fires #/year	58–61	2594
PRESCRIBED BURNING Area-Acres	62–67	0
Quant. tons/acre	68–70	0
	71–77	
Action	78	A
	79	A
cd	80	5

COMMENTS	10–77	NEW CASTLE COUNTY 1987
Action	78	A
	79	A
cd	80	6

EPA (Dum) 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ____________

Name of Person Completing Form ____________

State		County				AQCR		
1	2	3	4	5	6	7	8	9
3	9	7	1	6	0	0	4	5

Year of Record	EMISSION ESTIMATES (10^2 tons) Particulate	SO$_2$	NO$_x$	HC	CO	SULFUR CONTENT (%) Anth. Coal	Bitum. Coal	Dist. Oil	Resid Oil	ASH CONTENT (%) Anth. Coal	Bitum. Coal	RESIDENTIAL FUEL Anth. 10^2 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gal.	Resid. Oil 10^4 Gal.	Nat. Gas 10^7 ft.^{3}	Wood 10^2 tons		Action		cd
10 11	12 13 14 15 16	17 18 19 20 21	22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37	38 39	40 41	42 43	44 45 46	47 48 49	50 51 52 53	54 55 56 57 58	59 60 61 62 63	64 65 66 67 68	69 70 71 72 73	74 75 76	77	78	79	80
8 7						0▲6	2▲1	0▲2	0▲5	1 3▲1	1 0▲4	4 0 9		2 1 8 2 1		6 5 4 3		0	A	A	1

COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10^1 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Wood 10^2 tons	INDUSTRIAL FUEL Anth. Coal 10^1 tons	Bitum. Coal 10^1 tons	Coke 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft.^{3}	OFF HIWAY DIESEL Farm 10^3 Gals.	Const. 10^4 Gals.		Action		cd
10 11 12 13 14	15 16 17 18 19	20 21 22 23 24	25 26 27 28 29	30 31 32 33	34 35	36 37 38 39 40 41	42 43 44 45 46 47	48 49 50 51	52 53 54 55 56	57 58 59 60 61	62 63 64 65 66	67 68 69	70 71 72 73	74 75 76 77	78	79	80
		2 0 4 6	6 5 8 8	3 0								0	9 1 4		A	A	2

ON SITE INCINERATION Comm. Inst. 10^2 tons	SURFACE COATING Architectural 10^2 lbs.	Auto Refinish. tons	Industrial 10^3 lbs.	DEGREASING Cold Cleaning 10^2 lbs.	O.T. Vapor & Conveyorized 10^3 lbs.	Comm./Cons. Solvent 10^2 lbs.	Graphic Arts 10^2 lbs.	Small Processes tons	Industrial Equip. 10^3 Gals.	DIESEL FUEL	Rail Locomotive 10^4 Gals.	County Population 10^3	Deletion	Action		cd
10 11 12 13 14 15	16 17 18 19 20	21 22 23 24	25 26 27 28 29 30	31 32 33 34 35 36	37 38 39 40 41 42	43 44 45 46 47 48 49	50 51 52 53 54	55 56 57 58 59	60 61 62 63 64	65 66 67	68 69 70 71 72	73 74 75 76	77	78	79	80
0	8 9 5 7 7	1 8 2 6	2 2 8 6 7 1	7 7 8 9 3	2 6 7 6 2	1 9 4 7 3 3	9 6 1 2	3 9 2 9	9 1 8 4		2 4 0 2			A	A	3

AIRCRAFT Military LTO CYC 10^1	Civil LTO CYC 10^1	Commercial LTO CYC 10^1	VESSELS Anth. Coal 10^1 tons	Diesel Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Gasoline 10^3 Gals.	GASOLINE MARKETING Stage I 10^4 Gals.	Stage II 10^4 Gals.	Other 10^4 Gals.	OFF HIWAY GASOLINE Farm 10^3 Gals.	Const. 10^3 Gals.	Small Engines 10^3 Gals.		Action		cd
10 11 12 13	14 15 16 17 18	19 20 21 22 23	24 25 26 27	28 29 30 31	32 33 34 35 36	37 38 39 40	41 42 43 44 45 46	47 48 49 50 51	52 53 54 55 56 57	58 59 60 61 62 63	64 65 66 67 68 69	70 71 72 73 74 75 76	77	78	79	80
4 9 2	1 7 6 0 6	1 2 7 1 9		1 3 0	1 2 8 1	4 3 8	3 3 6 2 8	3 3 6 2 8	3 3 6 2 8	0	6 8 8	4 1 2 7		A	A	4

Cutback Asphalt tons	Nat. Gas Leaks 10^3 lbs.	Dry Cleaning Solvent 10^2 lbs.	Pesticide Use 10^2 lbs.	FOREST FIRES Area - Acres	Quant. ton/acre	AGRICULTURAL & MISC. BURNING Area - Acres	Quant. tons/acre	INDUSTRIAL EQUIPMENT Gas 10^3 Gals.		Structure Fires #/year		PRESCRIBED BURNING Area-Acres	Quant. Tons/acre		Action		cd
10 11 12 13 14 15 16	17 18 19 20 21	22 23 24 25 26	27 28 29 30 31	32 33 34 35 36 37 38	39 40 41	42 43 44 45 46 47	48 49 50	51 52 53 54	55 56 57	58 59 60	61	62 63 64 65 66 67	68 69 70	71 72 73 74 75 76 77	78	79	80
6 8 4	1 4 0 7 7	4 4 2 0 5	0	0	0	0	0	3 3 5 5	1	7 1 2	0	0	0		A	A	6

COMMENTS		Action		cd
10–77		78	79	80
PHILADELPHIA COUNTY 1987		A	A	6

EPA (DUR) 219

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ____________

Name of Person Completing Form ____________

State	State	County	County	County	County	AQCR	AQCR	AQCR
1	2	3	4	5	6	7	8	9
3	1	4	9	0	0	0	4	5

Year of Record	EMISSION ESTIMATES (10^2 tons) Particulate	SO$_2$	NO$_x$	HC	CO	SULFUR CONTENT (%) Anth. Coal	Bitum. Coal	Dist. Oil	Resid Oil	ASH CONTENT (%) Anth. Coal	Bitum. Coal	RESIDENTIAL FUEL Anth. 10^2 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gal.	Resid. Oil 10^4 Gal.	Nat. Gas 10^7 ft.^{3}	Wood 10^2 tons	Action		cd
10–11	12–16	17–21	22–25	26–30	31–35	36–37	38–39	40–41	42–43	44–46	47–49	50–53	54–58	59–63	64–68	69–73	74–77	78	79	80
87						0.6	2.1	0.4	1.3	09.0	10.4	7		1680		60	5	A	A	1

COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10^1 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Wood 10^2 tons	INDUSTRIAL FUEL Anth. Coal 10^1 tons	Bitum. Coal 10^1 tons	Coke 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft.^{3}	OFF HIWAY DIESEL Farm 10^3 Gals.	Const. 10^4 Gals.		Action		cd
10–14	15–19	20–24	25–29	30–33	34–35	36–41	42–47	48–51	52–56	57–61	62–66	67–69	70–73	74–77	78	79	80
		353	266	60			180					47	17		A	A	2

ON SITE INCINERATION Comm. Inst. 10^2 tons	SURFACE COATING Archi-tectural 10^2 lbs.	Auto Refinish. tons	Industrial 10^2 lbs.	DEGREASING Cold Cleaning 10^2 lbs.	O.T. Vapor & Conveyorized 10^2 lbs.	Comm./Cons. Solvent 10^2 lbs.	Graphic Arts 10^2 lbs.	Small Processes tons	DIESEL FUEL Industrial Equip. 10^3 Gals.		Rail Locomotive 10^4 Gals.	County Population 10^3	Dummy Col.	Action		cd
10–15	16–20	21–24	25–30	31–36	37–42	43–49	50–54	55–59	60–64	65–67	68–72	73–76	77	78	79	80
7	3419	70	288	2973	40	7433	0	71	511		56			A	A	3

AIRCRAFT Military LTO CYC 10^1	Civil LTO CYC 10^1	Commercial LTO CYC 10^1	VESSELS Anth. Coal 10^1 tons	Diesel Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Gasoline 10^3 Gals.	GASOLINE MARKETING Stage I 10^4 Gals.	Stage II 10^4 Gals.	Other 10^4 Gals.	OFF HIWAY GASOLINE Farm 10^3 Gals.	Const. 10^3 Gals.	Small Engines 10^3 Gals.		Action		cd
10–13	14–18	19–23	24–27	28–31	32–36	37–40	41–46	47–51	52–57	58–63	64–69	70–76	77	78	79	80
	1293			137	1292	139	1934	1934	1934	702	13	227		A	A	4

Cutback Asphalt tons	Nat. Gas Leaks 10^3 lbs.	Dry Cleaning Solvent 10^2 lbs.	Pesticide Use 10^2 lbs.	FOREST FIRES Area - Acres	Quant. tons/acre	AGRICULTURAL & MISC. BURNING Area - Acres	Quant. tons/acre	INDUSTRIAL EQUIPMENT Gas 10^3 Gals.		Structure Fires #/year	PRESCRIBED BURNING Area-Acres	Quant. Tons/ Acre		Action		cd
10–16	17–21	22–26	27–31	32–38	39–41	42–47	48–50	51–54	55–57	58–61	62–67	68–70	71–77	78	79	80
442	327	1003	15491	701	11	311	1	187	1	310	0	0		A	A	5

COMMENTS	Action		cd
10–77	78	79	80
SALEM COUNTY 1987	A	A	6

EPA (DUR) .19

APPENDIX B

AREA SOURCE ALLOCATION PARAMETERS

This Appendix contains the two computer files used for allocating the county activity parameters to the 502-cell grid system. The two files are AQALLOC control cards and AQZTOGR output merged with AQALLOC input. These files are discussed separately in the sections that follow. A separate set of files is provided for 1979 and 1987.

AQALLOC CONTROL CARDS

This file contains the 38 AQALLOC control cards for each of the 11 counties in the Philadelphia AQCR. The purpose of this file is to match the NEDS card activity categories to the correct allocation parameter. Although the file that follows is identified as 1979, the same file was used for 1987 as for 1979.

The first control card listed functions as the matching mechanism between the allocation parameters and the NEDS activity categories. Alphanumeric characters which define the allocation parameters are placed in the card columns corresponding to the 54 positions on the NEDS area source input form. A blank column in this control card signifies that the corresponding NEDS category had no activity. The control card-NEDS category relationship is shown below.

Column	Category Allocated
11	Not used
12	Not used
13	Not used
14	Not used
15	Not used
16	Anthracite Coal, Residential Fuel
17	Bituminous Coal, Residential Fuel
18	Distillate Oil, Residential Fuel
19	Residual Oil, Residential Fuel
20	Natural Gas, Residential Fuel
21	Wood, Residential Fuel
22	Anthracite Coal, Commercial/Institutional Fuel
23	Bituminous Coal, Commercial/Institutional Fuel
24	Distillate Oil, Commercial/Institutional Fuel
25	Residual Oil, Commercial/Institutional Fuel
26	Natural Gas, Commercial/Institutional Fuel
27	Wood, Commercial/Institutional Fuel
28	Anthracite Coal, Industrial Fuels
29	Bituminous Coal, Industrial Fuels
30	Coke, Industrial Fuels
31	Distillate Oil, Industrial Fuels
32	Residual Oil, Industrial Fuels
33	Natural Gas, Industrial Fuels
34	Farm Diesel Oil
35	Construction Diesel Oil
36	Commercial/Institutional, On-site Incineration
37	Architectural Surface Coating
38	Auto Refinishing
39	Industrial Surface Coating
40	Cold Cleaning Degreasing
41	O.T. Vapor and Conveyorized Degreasing
42	Commercial/Consumer Solvent
43	Graphic Arts
44	Small Processes
45	Industrial Equipment Diesel

Column	Category Allocated
46	Not Used
47	Railroad
48	Military, Aircraft
49	Civil, Aircraft
50	Commercial, Aircraft
51	Coal, Vessels
52	Diesel Oil, Vessels
53	Residual Oil, Vessels
54	Gasoline, Vessels
55	Stage I Gasoline Marketing
56	Stage II Gasoline Marketing
57	Other Gasoline Marketing
58	Farm Gasoline
59	Construction Gasoline
60	Small Engine Gasoline
61	Cutback Asphalt
62	Natural Gas Leaks
63	Dry Cleaning
64	Pesticide Use
65	Forest Wildfires
66	Agricultural and Miscellaneous Burning
67	Industrial Equipment Gasoline
68	Structural Fires
69	Prescribed Burning

The second control card identifies the allocation parameters used by defining the alphanumeric characters inserted in the first control card. A missing alphanumeric character signifies that the character was not used. The format of this card (a total of 36 cards can be used) is as follows:

Column	Parameter
5	Alphanumeric character code (A through Z and 1 through 0)
11-80	Explanation of allocation parameter used

```
     OSI DATA MANAGEMENT UTILITY "PDSLIST"         VER 3-4     TIME:  16.49.26        DATE: 01/27/83 (83027)        PAGE       1
   PDS=CN1511.ESI.PHIL79.CNTR                     VOL=STOR02   OPT: LN/PG=51              THOLD=10
   ------------------------------------------------------------------------------------------------------------------------------
   MEMBER NAME: BUCK                                   ALIASES: NONE

                                                  BUCKS COUNTY 1979
                                           H H HH  NNN  O   06Q      N73458RJKL IISBF66QHFHN606 HR
                              A      AREA
                              B     POPULATION DIVIDED BY 100
                              C     VMT AUTO AND LIGHT TRUCK DIVIDED BY 1000
                              D     VMT HIWAY GAS TRUCK DIVIDED BY 1000
                              E     VMT HIWAY DIESEL TRUCK DIVIDED BY 1000
                              F     VMT TOTAL DAILY DIVIDED BY 1000
                              G     COUNTY CODE
                              H     OCCUPIED HOUSEHOLDS
                              I     COMMERCIAL VESSELS
                              J     MILITARY AIRCRAFT
                              K     CIVIL AIRCRAFT
                              L     COMMERCIAL AIRCRAFT
                              M     TOTAL EMPLOYMENT
                              N     COMMERCIAL EMPLOYMENT
                              O     MANUFACTURING EMPLOYMENT
                              P     AGRICULTURAL EMPLOYMENT
                              Q     CONSTRUCTION EMPLOYMENT
                              R     RAILROAD TRACK MILES FROM USGS MAPS MULTIPLIED BY 10
                              S     RECREATIONAL VESSELS
                              T
                              U
                              V
                              W
                              X
                              Y
                              Z
                              1
                              2
                              3     PERCENTAGE PINE ACREAGE
                              4     PERCENTAGE OAK ACREAGE
                              5     PERCENTAGE NC-NI ACREAGE
                              6     PERCENTAGE CROP ACREAGE
                              7     PERCENTAGE GRASSLAND ACREAGE
                              8     PERCENTAGE MARSH ACREAGE
                              9
                              0     PERCENTAGE FOREST ACREAGE
         ***** END OF MEMBER 'BUCK' *****                                         38 LINE(S) IN THIS MEMBER
     OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.26        DATE: 01/27/83 (83027)         PAGE       2
PDS=CN1511.ESI.PHIL79.CNTR                       VOL=STOR02   OPT: LN/PG=51              THOLD=10
   ----------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: BURL                                           ALIASES: NONE

                                                            BURLINGTON COUNTY 1979
                                                     H H HH  NNN  O   06Q  N  N73458RJKL IISBF66QHFHN606 H0
                                       A      AREA
                                       B     POPULATION DIVIDED BY 100
                                       C     VMT AUTO AND LIGHT TRUCK DIVIDED BY 1000
                                       D     VMT HIWAY GAS TRUCK DIVIDED BY 1000
                                       E     VMT HIWAY DIESEL TRUCK DIVIDED BY 1000
                                       F     VMT TOTAL DAILY DIVIDED BY 1000
                                       G     COUNTY CODE
                                       H     OCCUPIED HOUSEHOLDS
                                       I     COMMERCIAL VESSELS
                                       J     MILITARY AIRCRAFT
                                       K     CIVIL AIRCRAFT
                                       L     COMMERCIAL AIRCRAFT
                                       M     TOTAL EMPLOYMENT
                                       N     COMMERCIAL EMPLOYMENT
                                       O     MANUFACTURING EMPLOYMENT
                                       P     AGRICULTURAL EMPLOYMENT
                                       Q     CONSTRUCTION EMPLOYMENT
                                       R     RAILROAD TRACK MILES FROM USGS MAPS MULTIPLIED BY 10
                                       S     RECREATIONAL VESSELS
                                       T
                                       U
                                       V
                                       W
                                       X
                                       Y
                                       Z
                                       1
                                       2
                                       3      PERCENTAGE PINE ACREAGE
                                       4      PERCENTAGE OAK ACREAGE
                                       5      PERCENTAGE NC-NI ACREAGE
                                       6      PERCENTAGE CROP ACREAGE
                                       7      PERCENTAGE GRASSLAND ACREAGE
                                       8      PERCENTAGE MARSH ACREAGE
                                       9
                                       0      PERCENTAGE FOREST ACREAGE
          ***** END OF MEMBER 'BURL' *****                                                38 LINE(S) IN THIS MEMBER
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.26       DATE: 01/27/83 (83027)        PAGE      3
  PDS=CN1511.ESI.PHIL79.CNTR                         VOL=STOR02   OPT: LN/PG=51            THOLD=10
-----------------------------------------------------------------------------------------------------------------------------
                                                     ALIASES: NONE
  MEMBER NAME: CAMD

                                                       CAMDEN COUNTY 1979
                                             H H HH  NNN  O   O6Q  N  N73458RJKL IISBF66QHFHN606 HO
                                  A      AREA
                                  B     POPULATION DIVIDED BY 100
                                  C     VMT AUTO AND LIGHT TRUCK DIVIDED BY 1000
                                  D     VMT HIWAY GAS TRUCK DIVIDED BY 1000
                                  E     VMT HIWAY DIESEL TRUCK DIVIDED BY 1000
                                  F     VMT TOTAL DAILY DIVIDED BY 1000
                                  G     COUNTY CODE
                                  H     OCCUPIED HOUSEHOLDS
                                  I     COMMERCIAL VESSELS
                                  J     MILITARY AIRCRAFT
                                  K     CIVIL AIRCRAFT
                                  L     COMMERCIAL AIRCRAFT
                                  M     TOTAL EMPLOYMENT
                                  N     COMMERCIAL EMPLOYMENT
                                  O     MANUFACTURING EMPLOYMENT
                                  P     AGRICULTURAL EMPLOYMENT
                                  Q     CONSTRUCTION EMPLOYMENT
                                  R     RAILROAD TRACK MILES FROM USGS MAPS MULTIPLIED BY 10
                                  S     RECREATIONAL VESSELS
                                  T
                                  U
                                  V
                                  W
                                  X
                                  Y
                                  Z
                                  1
                                  2
                                  3     PERCENTAGE PINE ACREAGE
                                  4     PERCENTAGE OAK ACREAGE
                                  5     PERCENTAGE NC-NI ACREAGE
                                  6     PERCENTAGE CROP ACREAGE
                                  7     PERCENTAGE GRASSLAND ACREAGE
                                  8     PERCENTAGE MARSH ACREAGE
                                  9
                                  0     PERCENTAGE FOREST ACREAGE
                                                                                    38 LINE(S) IN THIS MEMBER
          ***** END OF MEMBER 'CAMD' *****
```

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   OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.26        DATE: 01/27/83 (83027)        PAGE       4
PDS=CN1511.ESI.PHIL79.CNTR                     VOL=STOR02   OPT: LN/PG=51                THOLD=10
----------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: CHEST                                         ALIASES: NONE
                                                          CHESTER COUNTY 1979
                                                   H H HH  NNN  0   06Q     N73458RJKL IISBF66QHFHN606 HR
                                     A       AREA
                                     B      POPULATION DIVIDED BY 100
                                     C      VMT AUTO AND LIGHT TRUCK DIVIDED BY 1000
                                     D      VMT HIWAY GAS TRUCK DIVIDED BY 1000
                                     E      VMT HIWAY DIESEL TRUCK DIVIDED BY 1000
                                     F      VMT TOTAL DAILY DIVIDED BY 1000
                                     G      COUNTY CODE
                                     H      OCCUPIED HOUSEHOLDS
                                     I      COMMERCIAL VESSELS
                                     J      MILITARY AIRCRAFT
                                     K      CIVIL AIRCRAFT
                                     L      COMMERCIAL AIRCRAFT
                                     M      TOTAL EMPLOYMENT
                                     N      COMMERCIAL EMPLOYMENT
                                     O      MANUFACTURING EMPLOYMENT
                                     P      AGRICULTURAL EMPLOYMENT
                                     Q      CONSTRUCTION EMPLOYMENT
                                     R      RAILROAD TRACK MILES FROM USGS MAPS MULTIPLIED BY 10
                                     S      RECREATIONAL VESSELS
                                     T
                                     U
                                     V
                                     W
                                     X
                                     Y
                                     Z
                                     1
                                     2
                                     3       PERCENTAGE PINE ACREAGE
                                     4       PERCENTAGE OAK ACREAGE
                                     5       PERCENTAGE NC-NI ACREAGE
                                     6       PERCENTAGE CROP ACREAGE
                                     7       PERCENTAGE GRASSLAND ACREAGE
                                     8       PERCENTAGE MARSH ACREAGE
                                     9
                                     0       PERCENTAGE FOREST ACREAGE
                                                                                    38 LINE(S) IN THIS MEMBER
          ***** END OF MEMBER 'CHEST' *****
```

```
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.26        DATE: 01/27/83 (83027)       .PAGE      5
PDS=CN1511.ESI.PHIL79.CNTR                          VOL=STOR02   OPT: LN/PG=51              THOLD=10
   -------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: DELA                                        ALIASES: NONE

                                                        DELAWARE COUNTY 1979
                                                 H H HH  NNN  0   06Q      N73458RJKL IISBF66QHFHN606 HR
                                       A          AREA
                                       B        POPULATION DIVIDED BY 100
                                       C        VMT AUTO AND LIGHT TRUCK DIVIDED BY 1000
                                       D        VMT HIWAY GAS TRUCK DIVIDED BY 1000
                                       E        VMT HIWAY DIESEL TRUCK DIVIDED BY 1000
                                       F        VMT TOTAL DAILY DIVIDED BY 1000
                                       G        COUNTY CODE
                                       H        OCCUPIED HOUSEHOLDS
                                       I        COMMERCIAL VESSELS
                                       J        MILITARY AIRCRAFT
                                       K        CIVIL AIRCRAFT
                                       L        COMMERCIAL AIRCRAFT
                                       M        TOTAL EMPLOYMENT
                                       N        COMMERCIAL EMPLOYMENT
                                       O        MANUFACTURING EMPLOYMENT
                                       P        AGRICULTURAL EMPLOYMENT
                                       Q        CONSTRUCTION EMPLOYMENT
                                       R        RAILROAD TRACK MILES FROM USGS MAPS MULTIPLIED BY 10
                                       S        RECREATIONAL VESSELS
                                       T
                                       U
                                       V
                                       W
                                       X
                                       Y
                                       Z
                                       1
                                       2
                                       3        PERCENTAGE PINE ACREAGE
                                       4        PERCENTAGE OAK ACREAGE
                                       5        PERCENTAGE NC-HI ACREAGE
                                       6        PERCENTAGE CROP ACREAGE
                                       7        PERCENTAGE GRASSLAND ACREAGE
                                       8        PERCENTAGE MARSH ACREAGE
                                       9
                                       0        PERCENTAGE FOREST ACREAGE
        ***** END OF MEMBER 'DELA' *****                                              38 LINE(S) IN THIS MEMBER
   OSI DATA MANAGEMENT UTILITY "PDSLIST"       VER 3-4    TIME:  16.49.26      DATE: 01/27/83 (83027)       PAGE      6
PDS=CN1511.ESI.PHIL79.CNTR                    VOL=STOR02   OPT: LN/PG=51            THOLD=10
   ----------------------------------------------------------------------------------------------------------------
MEMBER NAME: GLOUC                               ALIASES: HONE

                                                  GLOUCESTER COUNTY 1979
                                         H H HH  NNN  0   06Q  N  N73458RJKL IISBF66QHFHN606 H0
                                A      AREA
                                B     POPULATION DIVIDED BY 100
                                C     VMT AUTO AND LIGHT TRUCK DIVIDED BY 1000
                                D     VMT HIWAY GAS TRUCK DIVIDED BY 1000
                                E     VMT HIWAY DIESEL TRUCK DIVIDED BY 1000
                                F     VMT TOTAL DAILY DIVIDED BY 1000
                                G     COUNTY CODE
                                H     OCCUPIED HOUSEHOLDS
                                I     COMMERCIAL VESSELS
                                J     MILITARY AIRCRAFT
                                K     CIVIL AIRCRAFT
                                L     COMMERCIAL AIRCRAFT
                                M     TOTAL EMPLOYMENT
                                N     COMMERCIAL EMPLOYMENT
                                O     MANUFACTURING EMPLOYMENT
                                P     AGRICULTURAL EMPLOYMENT
                                Q     CONSTRUCTION EMPLOYMENT
                                R     RAILROAD TRACK MILES FROM USGS MAPS MULTIPLIED BY 10
                                S     RECREATIONAL VESSELS
                                T
                                U
                                V
                                W
                                X
                                Y
                                Z
                                1
                                2
                                3     PERCENTAGE PINE ACREAGE
                                4     PERCENTAGE OAK ACREAGE
                                5     PERCENTAGE NC-NI ACREAGE
                                6     PERCENTAGE CROP ACREAGE
                                7     PERCENTAGE GRASSLAND ACREAGE
                                8     PERCENTAGE MARSH ACREAGE
                                9
                                0     PERCENTAGE FOREST ACREAGE
        ***** END OF MEMBER 'GLOUC' *****                                       38 LINE(S) IN THIS MEMBER
```

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     OSI DATA MANAGEMENT UTILITY "PDSLIST"         VER 3-4     TIME: 16.49.26        DATE: 01/27/83 (83027)        PAGE      7
PDS=CN1511.ESI.PHIL79.CNTR                       VOL=STOR02   OPT: LN/PG=51             THOLD=10
   -------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: MERC                                   ALIASES: NONE

                                                  MERCER COUNTY 1979
                                         H H HH  NNN  0   06Q  N  N73458RJKL IISBF66QHFHN606 H0
                              A       AREA
                              B      POPULATION DIVIDED BY 100
                              C      VMT AUTO AND LICHT TRUCK DIVIDED BY 1000
                              D      VMT HIWAY GAS TRUCK DIVIDED BY 1000
                              E      VMT HIWAY DIESEL TRUCK DIVIDED BY 1000
                              F      VMT TOTAL DAILY DIVIDED BY 1000
                              G      COUNTY CODE
                              H      OCCUPIED HOUSEHOLDS
                              I      COMMERCIAL VESSELS
                              J      MILITARY AIRCRAFT
                              K      CIVIL AIRCRAFT
                              L      COMMERCIAL AIRCRAFT
                              M      TOTAL EMPLOYMENT
                              N      COMMERCIAL EMPLOYMENT
                              O      MANUFACTURING EMPLOYMENT
                              P      AGRICULTURAL EMPLOYMENT
                              Q      CONSTRUCTION EMPLOYMENT
                              R      RAILROAD TRACK MILES FROM USGS MAPS MULTIPLIED BY 10
                              S      RECREATIONAL VESSELS
                              T
                              U
                              V
                              W
                              X
                              Y
                              Z
                              1
                              2
                              3      PERCENTAGE PINE ACREAGE
                              4      PERCENTAGE OAK ACREAGE
                              5      PERCENTAGE NC-NI ACREAGE
                              6      PERCENTAGE CROP ACREAGE
                              7      PERCENTAGE GRASSLAND ACREAGE
                              8      PERCENTAGE MARSH ACREAGE
                              9
                              0      PERCENTAGE FOREST ACREAGE
         ***** END OF MEMBER 'MERC' *****                                          38 LINE(S) IN THIS MEMBER
```

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  OSI DATA MANAGEMENT UTILITY "PDSLIST"      VER 3-4    TIME:  16.49.26      DATE: 01/27/83 (83027)        PAGE      8
PDS=CN1511.ESI.PHIL79.CNTR                   VOL=STOR02   OPT: LN/PG=51            THOLD=10
----------------------------------------------------------------------------------------------------------------------
MEMBER NAME: MONT                                   ALIASES: NONE

                                                  MONTGOMERY COUNTY 1979
                                        H H HH  NNN  0   06Q     N73458RJKL IISBF66QHFHN606 HR
                              A       AREA
                              B      POPULATION DIVIDED BY 100
                              C      VMT AUTO AND LIGHT TRUCK DIVIDED BY 1000
                              D      VMT HIWAY GAS TRUCK DIVIDED BY 1000
                              E      VMT HIWAY DIESEL TRUCK DIVIDED BY 1000
                              F      VMT TOTAL DAILY DIVIDED BY 1000
                              G      COUNTY CODE
                              H      OCCUPIED HOUSEHOLDS
                              I      COMMERCIAL VESSELS
                              J      MILITARY AIRCRAFT
                              K      CIVIL AIRCRAFT
                              L      COMMERCIAL AIRCRAFT
                              M      TOTAL EMPLOYMENT
                              N      COMMERCIAL EMPLOYMENT
                              O      MANUFACTURING EMPLOYMENT
                              P      AGRICULTURAL EMPLOYMENT
                              Q      CONSTRUCTION EMPLOYMENT
                              R      RAILROAD TRACK MILES FROM USGS MAPS MULTIPLIED BY 10
                              S      RECREATIONAL VESSELS
                              T
                              U
                              V
                              W
                              X
                              Y
                              Z
                              1
                              2
                              3       PERCENTAGE PINE ACREAGE
                              4       PERCENTAGE OAK ACREAGE
                              5       PERCENTAGE NC-NI ACREAGE
                              6       PERCENTAGE CROP ACREAGE
                              7       PERCENTAGE GRASSLAND ACREAGE
                              8       PERCENTAGE MARSH ACREAGE
                              9
                              0       PERCENTAGE FOREST ACREAGE
                                                                              38 LINE(S) IN THIS MEMBER
         ***** END OF MEMBER 'MONT' *****
```

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     OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.26       DATE: 01/27/83 (83027)        PAGE       9
PDS=CN1511.ESI.PHIL79.CNTR                       VOL=STOR02   OPT: LN/PG=51            THOLD=10
   -------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: NEWCASTL                                           ALIASES: NONE

                                                                NEW CASTLE COUNTY
                                    B B BBM MMM                    06Q       73458RJKL IISBC66QHCHM606 B0
                              A     AREA
                              B     POPULATION
                              C     VMT
                              D
                              E
                              F
                              G
                              H     DWELLING UNITS 1976
                              I     COMMERCIAL VESSELS
                              J     MILITARY AIRCRAFT
                              K     CIVIL AIRCRAFT
                              L     COMMERCIAL AIRCAFT
                              M     COMMERCIAL EMPLOYMENT
                              N
                              O     MANUFACTURING EMPLOYMENT
                              P
                              Q     CONSTRUCTION ACREAGE
                              R
                              S
                              T
                              U
                              V
                              W
                              X
                              Y
                              Z
                              1
                              2
                              3     PERCENTAGE PINE ACREAGE
                              4     PERCENTAGE OAK  ACREAGE
                              5     PERCENTAGE NC-NI ACREAGE
                              6     PERCENTAGE CROP ACREAGE
                              7     PERCENTAGE GRASSLAND ACREAGE
                              8     PERCENTAGE MARSH ACREAGE
                              9
                              0     PERCENTAGE FOREST ACREAGE
        ***** END OF MEMBER 'NEWCASTL' *****
                                                                                 38 LINE(S) IN THIS MEMBER
```

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    OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.26        DATE: 01/27/83 (83027)        PAGE     10
PDS=CN1511.ESI.PHIL79.CNTR                        VOL=STOR02   OPT: LN/PG=51             THOLD=10
 ---------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: PHIL                                    ALIASES: NONE

                                                   PHILADELPHIA COUNTY 1979
                                             H H HH  NNN  0   06Q     N73458RJKL IISBF66QHFHN606 HR
                              A       AREA
                              B      POPULATION DIVIDED BY 100
                              C      VMT AUTO AND LIGHT TRUCK DIVIDED BY 1000
                              D      VMT HIWAY GAS TRUCK DIVIDED BY 1000
                              E      VMT HIWAY DIESEL TRUCK DIVIDED BY 1000
                              F      VMT TOTAL DAILY DIVIDED BY 1000
                              G      COUNTY CODE
                              H      OCCUPIED HOUSEHOLDS
                              I      COMMERCIAL VESSELS
                              J      MILITARY AIRCRAFT
                              K      CIVIL AIRCRAFT
                              L      COMMERCIAL AIRCRAFT
                              M      TOTAL EMPLOYMENT
                              N      COMMERCIAL EMPLOYMENT
                              O      MANUFACTURING EMPLOYMENT
                              P      AGRICULTURAL EMPLOYMENT
                              Q      CONSTRUCTION EMPLOYMENT
                              R      RAILROAD TRACK MILES FROM USGS MAPS MULTIPLIED BY 10
                              S      RECREATIONAL VESSELS
                              T
                              U
                              V
                              W
                              X
                              Y
                              Z
                              1
                              2
                              3      PERCENTAGE PINE ACREAGE
                              4      PERCENTAGE OAK ACREAGE
                              5      PERCENTAGE NC-NI ACREAGE
                              6      PERCENTAGE CROP ACREAGE
                              7      PERCENTAGE GRASSLAND ACREAGE
                              8      PERCENTAGE MARSH ACREAGE
                              9
                              0      PERCENTAGE FOREST ACREAGE
       ***** END OF MEMBER 'PHIL' *****                                        38 LINE(S) IN THIS MEMBER
```

```
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.26       DATE: 01/27/83 (83027)        PAGE      11
   PDS=CN1511.ESI.PHIL79.CNTR                        VOL=STOR02   OPT: LN/PG=51              THOLD=10
   --------------------------------------------------------------------------------------------------------------------------------
   MEMBER NAME: SALEM
                                                     ALIASES: NONE

                                                     SALEM COUNTY 1979
                                  B B BB  NNN  O     6Q  N ON73458RJKL IISBN66QBBDN606 B0
                           A      AREA
                           B      POPULATION 1979
                           C      POPULATION 1982
                           D      POPULATION 1987
                           E      POPULATION CHANGE 1979 TO 1982
                           F      POPULATION CHANGE 1979 TO 1987
                           G      COUNTY CODE
                           H
                           I      COMMERCIAL VESSELS
                           J      MILITARY AIRCRAFT
                           K      CIVIL AIRCRAFT
                           L      COMMERCIAL AIRCRAFT
                           M      TOTAL EMPLOYMENT 1979
                           N      COMMERCIAL EMPLOYMENT 1979
                           O      MANUFACTURING EMPLOYMENT 1979
                           P      AGRIGULTURAL EMPLOYMENT 1979
                           Q      CONSTRUCTION EMPLOYMENT 1979
                           R      RAILROAD TRACK MILES FROM USGS MAPS MULTIPLIED BY 10
                           S      RECREATIONAL VESSELS
                           T
                           U
                           V
                           W      TOTAL EMPLOY (FXM) 1987
                           X      COMMERCIAL EMPLOY (FXN) 1987
                           Y      MANUFACTURING EMPLOY (FXO) 1987
                           Z      CONSTRUCTION EMPLOY (FXQ) 1987
                           1
                           2
                           3      PERCENTAGE PINE ACREAGE
                           4      PERCENTAGE OAK ACREAGE
                           5      PERCENTAGE NC-NI ACREAGE
                           6      PERCENTAGE CROP ACREAGE
                           7      PERCENTAGE GRASSLAND ACREAGE
                           8      PERCENTAGE MARSH ACREAGE
                           9
                           0      PERCENTAGE FOREST
           ***** END OF MEMBER 'SALEM' *****
                                                                                     38 LINE(S) IN THIS MEMBER
   END OF LISTING FOR CN1511.ESI.PHIL79.CNTR
   THE DIRECTORY END-OF-FILE INDICATOR WAS FOUND IN BLOCK     2 OF THE    418 LINES,      11 MEMBERS, AVERAGE 33 LINES/MEMBER       CC=00
                                                                           5 DIRECTORY BLOCK(S) ALLOCATED FOR THIS PDS
```

AQZTOGR OUTPUT FILE

The AQZTOGR program transforms allocation parameters from a given geographic base to a grid system. In this case, the allocation parameters were input to AQZTOGR by census tracts, traffic zones, and municipalities. The AQZTOGR output file is formatted to be merged with the AQALLOC input file which is discussed in the section that follows. The alphanumeric character codes described in the previous section identify the associated allocation parameter columns used in the AQZTOGR output file. Separate files were generated for 1979 and 1987. There are two cards in this file for each area source grid in the Philadelphia AQCR. Card columns 1 through 24 on both cards are identical:

Column	Value
1-3	Grid identification number
4-13	County code (SAROAD)
14-15	Year (if desired)
16-19	U.T.M. Easting
20-24	U.T.M. Northing
80	Card type (1 or 2)

The remainder of the cards supply the actual allocation parameters:

Columns	Alphanumeric Character (defines allocation parameter listed in each field)	
25/30	A	CARD 1
31/35	B	
36/40	C	
41/44	D	
45/48	E	
49/52	F	
53/56	G	
57/60	H	
61/64	I	
65/68	J	
69/72	K	
73/76	L	
25/30	M	CARD 2
31/35	N	
36/40	O	
41/44	P	
45/48	Q	
49/52	R	
53/56	S	
57/60	T	
61/64	U	
65/68	V	
69/72	W	
73/76	X	

AQALLOC INPUT FILE

This file contains the remainder of the allocation parameters input to the AQALLOC program. The allocation parameters in the file were compiled and coded by ES personnel. The alphanumeric characters and card columns described for the AQZTOGR output file apply to the AQALLOC input file. There are three cards in the AQALLOC input file for each grid in the Philadelphia AQCR to allow for additional allocation parameters. The AQZTOGR output and AQALLOC input files are merged before the AQALLOC program is executed. Card columns 1 through 24 are the same for each card and contain the same information as the AQZTOGR output cards. Card column 80, however, contains a 1, 2, or 3 as a card type indicator. Card columns 25 through 76 in cards 1 and 2 are identical to the corresponding fields and cards described for the AQZTOGR output file. The format for fields 25 through 76 in card type 3 are:

Columns	Alphanumeric Character (defines allocation parameter listed in each field)	
25/30	Y	CARD 3
31/35	Z	
36/40	1	
41/44	2	
45/48	3	
49/52	4	
53/56	5	
57/60	6	
61/64	7	
65/68	8	
69/72	9	
73/76	0	

The 1979 and 1987 files that follow have the AQZTOGR output file merged with the AQALLOC input file.

```
    OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)         PAGE       1
  PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS              VOL=STOR02   OPT: LN/PG=51                 THOLD=10
   ------------------------------------------------------------------------------------------------------------------------------

  MEMBER NAME: BUCK                                      ALIASES: NONE

                   1       1200 0477044900 61776  846     8   1   1    9 624 279    0    0    0    0    1
                   1       1200 0    0    0   121   58   43   0  20    0   0   0    0    0    0    0    2
                   1       1200 0477044900      0    0    0   0   2   15  20   0   60    0    0    0    3
                   2       1200 0482044900 61775 1611    22   1   2   251680 550    0    0    0    0    1
                   2       1200 0    0    0   237  120   81   0  36    0   1   0    0    0    0    0    2
                   2       1200 0    0    0     0    0    0   0   0    5  10   0   80    0    0    0    3
                   3       1200 0472044850 61776  777     2   0   0    3 240 244    0    0    0    0    1
                   3       1200 0    0    0    64   29    2   0  33    0   0   0    0    0    0    0    2
                   3       1200 0    0    0     0    0    0   0   0    5  10  40   40    0    0    0    3
                   4       1200 0477044850 61776 1426    10   1   1   11 612 453    0    0    0    0    1
                   4       1200 0    0    0   150   77   23   0  48    0   0   0    0    0    0    0    2
                   4       1200 0    0    0     0    0    0   0   2   15  30  10   40    0    0    0    3
                   5       1200 0482044850 61776  706    15   1   1   16 420 225    0    0    0    0    1
                   5       1200 0    0    0   111   76   26   0   7    0   0   0    0    0    0    0    2
                   5       1200 0    0    0     0    0    0   0   0   10  20   0   65    0    0    0    3
                   6       1200 0487044850 61776 1758    24   2   2   271224 584    0    0    0    0    1
                   6       1200 0    0    0   167  125   23   2  15    0   0   0    0    0    0    0    2
                   6       1200 0    0    0     0    0    0   0  10   35  50   0    2    0    0    0    3
                   7       1200 0492044850 61776  838     8   1   1   10 480 277    0    0    0    0    1
                   7       1200 0    0    0    79   56    4   6   9    0   1   0    0    0    0    0    2
                   7       1200 0492044850      0    0    0   0   0    5  15   0   20    0    0    0    3
                   8       1200 0467044800 61776 1219    16   1   1   18 408 392    0    0    0    0    1
                   8       1200 0    0    0   231   78  105   1  44   20   0   0    0    0    0    0    2
                   8       1200 0467044800      0    0    0   0   2   30  50   0   15    0    0   10    3
                   9       1200 0472044800 61776 1877    32   2   2   341260 584    0    0    0    0    1
                   9       1200 0    0    0   333  162  167   1  48    0   0   0    0    0    0    0    2
                   9       1200 0    0    0     0    0    0   0   0    2   5  25   65    0    0    0    3
                  10       1200 0477044800 61776  834     7   0   0    8 480 262    0    0    0    0    1
                  10       1200 0    0    0    51   29    2   0  19    0   0   0    0    0    0    0    2
                  10       1200 0    0    0     0    0    0   0  15   20  45   0   20    0    0    0    3
                  11       1200 0482044800 61776  759    13   1   1   15 420 239    0    0    0    0    1
                  11       1200 0    0    0    83   63   13   1   8    0   0   0    0    0    0    0    2
                  11       1200 0    0    0     0    0    0   0   5   10  10  20   45    0    0    0    3
                  12       1200 0487044800 61776 1175    16   1   1   18 480 375    0    0   38    0    1
                  12       1200 0    0    0   148  103   12  10  16    0   0   0    0    0    0    0    2
                  12       1200 0    0    0     0    0    0   0   5   15  15   0   50    0    0    0    3
                  13       1200 0492044800 61776  485     5   0   0    6 180 156    0    0   33    0    1
                  13       1200 0    0    0    56   38    1   6   7    0   1   0    0    0    0    0    2
                  13       1200 0492044800      0    0    0   0   1    4   5   0   30    0    0    0    3
                  14       1200 0462044750 61776 2026    22   1   2   24 780 609    0    0    0    0    1
                  14       1200 0    0    0   315   95  200   3  16    0   0   0    0    0    0    0    2
                  14       1200 0462044750      0    0    0   0   1    5   5  25   50    0    0    0    3
                  15       1200 0467044750 61776 9112   173   9  10   19336003274    0    1   68   90    1
                  15       1200 0    0    0  6035 2616 3084  20 310   25   0   0    0    0    0    0    2
                  15       1200 0    0    0     0    0    0   0   1    5   5  25   40    0    0   10    3
                  16       1200 0472044750 61776 4242    81   4   5    9023041453    0    0    0    0    1
                  16       1200 0    0    0  1783  926  714  18 120   10   0   0    0    0    0    0    2
                  16       1200 0    0    0     0    0    0   0   2    5  10  10   60    0    0    5    3
                  17       1200 0477044750 61776 1012    15   1   1   17 576 321    0    0    0    0    1
                  17       1200 0    0    0   171  109   21   2  40    0   0   0    0    0    0    0    2
                  17       1200 0    0    0     0    0    0   0   2   30  50   0   18    0    0    0    3
   OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)        PAGE       2
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS             VOL=STOR02    OPT: LN/PG=51              THOLD=10
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MEMBER NAME: BUCK      (CONT)                        ALIASES: NONE

              18        1200 0482044750 61776  747   13   1   1  15 360 237   0   0   0   0   1
              18        1200 0    0    0  126   65   27   2  31   0   0   0   0   0   0   0   2
              18        1200 0    0    0    0    0    0   0   1   2   5  60  25   0   0   0   3
              19        1200 0487044750 61776 1247   18   1   1  20 492 399   0   0  38   0   1
              19        1200 0    0    0  207  106   41  12  42   0   0   0   0   0   0   0   2
              19        1200 0    0    0    0    0    0   0   1   5  10  55  25   0   0   0   3
              20        1200 0492044750 61776  742    9   0   1  10 240 238   0   0  38   0   1
              20        1200 0    0    0  135   63   34  12  23   0   1   0   0   0   0   0   2
              20        1200 0492044750     0    0    0   0   3   7  15   5  15   0   0   0   3
              22        1200 0457044700 61776  315   10   1   1  11 240 101   0   0   2   0   1
              22        1200 0    0    0   56   19   27   0  10   0   0   0   0   0   0   0   2
              22        1200 0457044700     0    0    0   0   0   0   0  15  15   0   C   0   3
              23        1200 0462044700 61776 1553   29   2   2  33 840 480   0   0   0   0   1
              23        1200 0    0    0  255   82  145   1  27   0   0   0   0   0   0   0   2
              23        1200 0462044700     0    0    0   0   4  15  24   8  28   0   0   0   3
              24        1200 0467044700 61776 3241  135   7   9 15120761009   0   0  45  60   1
              24        1200 0    0    0  796  396  346   6  48   0   0   0   0   0   0   0   2
              24        1200 0    0    0    0    0    0   0   2  15  25  10  45   0   0   0   3
              25        1200 0472044700 61776 3997   42   2   3  4712961324   0   0  51   0   1
              25        1200 0    0    0 1260  670  430  10 151  35   0   0   0   0   0   0   2
              25        1200 0    0    0    0    0    0   0   5  20  40   0  30   0   0  10   3
              26        1200 0477044700 61776 1936   29   1   2  32 780 607   0   0   0   0   1
              26        1200 0    0    0  450  318   40   4  88   0   0   0   0   0   0   0   2
              26        1200 0    0    0    0    0    0   0   1   1   1  50  42   0   0   0   3
              27        1200 0482044700 61776  722   14   1   1  15 324 230   0   0   0   0   1
              27        1200 0    0    0  149   66   41   4  39   0   0   0   0   0   0   0   2
              27        1200 0    0    0    0    0    0   0   1   1   1  65  20   0   0   0   3
              28        1200 0487044700 61776 1682   27   1   2  30 468 541   0   0   0   0   1
              28        1200 0    0    0  478  159  187  32 100   0   0   0   0   0   0   0   2
              28        1200 0    0    0    0    0    0   0   0   0   0  65  30   0   0   0   3
              29        1200 0492044700 61776 1817   24   1   2  27 444 605   0   0   0   0   1
              29        1200 0    0    0  499  189  186  32  89   0   1   0   0   0   0   0   2
              29        1200 0    0    0    0    0    0   0   5   3   5  30  50   0   0   0   3
              30        1200 0497044700 61776  864    7   0   0   8 240 317   0   0   0   0   1
              30        1200 0    0    0  155  113   24   2   9   0   1   0   0   0   0   0   2
              30        1200 0497044700     0    0    0   0   2   1   1  25  20   0   0   0   3
              35        1200 0462044650 61776  252    4   0   0   4  96  77   0   0   0   0   1
              35        1200 0    0    0   51   29   19   0   3   0   0   0   0   0   0   0   2
              35        1200 0462044650     0    0    0   0   4   6   6   0   3   0   0   0   3
              36        1200 0467044650 61776 1435   21   1   1  24 420 442   0   0   0   0   1
              36        1200 0    0    0  353  258   76   1  19   0   0   0   0   0   0   0   2
              36        1200 0    0    0    0    0    0   0   5  15  30  10  12   0   0   0   3
              37        1200 0472044650 6177612616  129   6   8 14430604215   0   0   0   0   1
              37        1200 0    0    0 5939 1965 3741   9 222   0   0   0   0   0   0   0   2
              37        1200 0    0    0    0    0    0   0   1   1   3   7  40   0   0   0   3
              38        1200 0477044650 61776 3037   36   2   2  401656 910   0   0   0   0   1
              38        1200 0    0    0  663  408  225   2  25   0   0   0   0   0   0   0   2
              38        1200 0    0    0    0    0    0   0   5   5   5  30  50   0   0   0   3
              39        1200 0482044650 61776 3487   63   3   3  7120641030   0   0   0   0   1
              39        1200 0    0    0 1106  297  745  10  55   0   0   0   0   0   0   0   2
              39        1200 0    0    0    0    0    0   0   1   2   5  65  20   0   0   0   3
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.30          DATE: 01/27/83 (83027)          PAGE       3
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS                VOL=STOR02    OPT: LN/PG=51                THOLD=10
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MEMBER NAME: BUCK      (CONT)                          ALIASES: NONE
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                     40        1200 0    0    0  542  222   194  30  97   0   0   0    0    0    0    0    2
                     40        1200 0    0    0    0    0     0   0   0   0   0  70   25    0    0    0    3
                     41        1200 0492044650 61776 2463    34   2   2  38 708 821    0    0    0    0    1
                     41        1200 0    0    0 1126  687   262  13 160   0   0   0    0    0    0    0    2
                     41        1200 0    0    0    0    0     0   0   2   1   1  80   10    0    0    0    3
                     42        1200 0497044650 61776 1386    13   1   1  14 396 491    0    0    0    0    1
                     42        1200 0    0    0  301  212    55   3  23  25   1   0    0    0    0    0    2
                     42        1200 0    0    0    0    0     0   0   5   5  10  40   30    0    0    0    3
                     43        1200 0502044650 61776 2326    45   2   2  501440 979    0    0    0    0    1
                     43        1200 0    0    0 2072  861  1092   3  87  20   1   0    0    0    0    0    2
                     43        1200 0502044650     0    0     0   0   1   2   2  20   15    0    0    0    3
                     53        1200 0467044600 61776  103     3   0   0   3  48  32    0    0    0    0    1
                     53        1200 0    0    0   36   23    11   0   1   0   0   0    0    0    0    0    2
                     53        1200 0467044600     0    0     0   0   0   0   0   0   95    0    0    0    3
                     54        1200 0472044600 61776 2873   110   6   7 1211560 888    0    0    0    0    1
                     54        1200 0    0    0 1418  787   583   5  39   0   0   0    0    0    0    0    2
                     54        1200 0    0    0    0    0     0   0   0   0   0  10   35    0    0    0    3
                     55        1200 0477044600 61776 4105    47   3   3  5210441186    0    0    0    0    1
                     55        1200 0    0    0 1184  623   397  21 138   0   0   0    0    0    0    0    2
                     55        1200 0    0    0    0    0     0   0   1   1   2  50   45    0    0    0    3
                     56        1200 0482044600 61776 5071    34   2   2  3921481278    0    0    0    0    1
                     56        1200 0    0    0 1039  577   280  24 160  20   0   0    0    0    0    0    2
                     56        1200 0    0    0    0    0     0   0   5   2   2  40   45    0    0    0    3
                     57        1200 0487044600 6177614708   152   7   9 16845605061    0    6  112  108    1
                     57        1200 0    0    0 8451 6338  1462 170 475  20   0   0    0    0    0    0    2
                     57        1200 0487044600     0    0     0   0   2   2   5  30   40    0   30    0    3
                     58        1200 0492044600 61776 2955    41   2   3  45 876 912    0    0    0    0    1
                     58        1200 0    0    0 1039  668   235  11 123  20   0   0    0    0    0    0    2
                     58        1200 0    0    0    0    0     0   0   5   5   5  40   40    0   40    0    3
                     59        1200 0497044600 61776 1904    22   1   1  25 660 586    0    0    0    0    1
                     59        1200 0    0    0  513  276   144   5  81  15   0   0    0    0    0    0    2
                     59        1200 0    0    0    0    0     0   0   5   5   5  50   30    0   50    0    3
                     60        1200 0502044600 61776 1599     5   0   0   5 480 507    0    0    0    0    1
                     60        1200 0    0    0  166  133    13   5  12   0   1   0    0    0    0    0    2
                     60        1200 0    0    0    0    0     0   0  10  20  40   5   28    0    5    0    3
                     61        1200 0507044600 61776  778     1   0   0   1 240 233    0    0    0    0    1
                     61        1200 0    0    0   59   51     1   3   5   0   1   0    0    0    0    0    2
                     61        1200 0507044600     0    0     0   0   2   2   5   7   20    0    7    0    3
                     74        1200 0477044550 61776 2965    43   2   3  49 804 818    0    0    0    0    1
                     74        1200 0    0    0  669  294   168  36 170  20   0   0    0    0    0    0    2
                     74        1200 0477044550     0    0     0   0   0   0   0  12   28    0   12    5    3
                     75        1200 0482044550 61776 6001    92   5   6 10224001695    0    0    0    0    1
                     75        1200 0    0    0 1554  684   385 119 280  10   0   0    0    0    0    0    2
                     75        1200 0    0    0    0    0     0   0   0   0   0  60   30    0   60    2    3
                     76        1200 0487044550 61776 6437    83   5   6  9914641798    0    0    7   90    1
                     76        1200 0    0    0 1830 1070   614  12 135   0   0   0    0    0    0    0    2
                     76        1200 0    0    0    0    0     0   0   0   2   5  30   60    0   30    0    3
                     77        1200 0492044550 61776 2020    30   2   2  34 804 586    0    0    0    0    1
                     77        1200 0    0    0  423  316    52   6  49   0   0   0    0    0    0    0    2
                     77        1200 0    0    0    0    0     0   0   0   2   5  40   50    0   40    0    3
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.30         DATE: 01/27/83 (83027)          PAGE      4
   PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS                    VOL=STOR02   OPT: LN/PG=51              THOLD=10
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                       78        1200 0    0    0  1267  289  493   8 454  30   0   0   0    0   0    0   2
                       78        1200 0    0    0     0    0    0   0   0   2   5  40  50    0  40    0   3
                       79        1200 0502044550 61776 1884   20   1   1  23 840 572   0    0   0    0   1
                       79        1200 0    0    0  1112  467  423  14 200   0   0   0   0    0   0    0   2
                       79        1200 0    0    0     0    0    0   0   2   2   5  50  40    0  50    0   3
                       80        1200 0507044550 61776 2541   30   2   2  34 780 717   0    0   0    0   1
                       80        1200 0    0    0   389  269   86   8  25   0   0   0   0    0   0    0   2
                       80        1200 0    0    0     0    0    0   0   1   1   5  60  30    0  60    0   3
                       81        1200 0512044550 61776 1236   18   1   1  20 360 348   0    0   0    0   1
                       81        1200 0    0    0   136  102   23   1   9   0   1   0   0    0   0    0   2
                       81        1200 0    0    0     0    0    0   0   0   3   3  10  10    0  10    0   3
                       97        1200 0482044500 61776 1049   21   1   1  23 300 297   0    0   0    0   1
                       97        1200 0    0    0   382  184  146   2  35   0   0   0   0    0   0    0   2
                       97        1200 0    0    0     0    0    0   0   0   1   1  16   2    0  16    0   3
                       98        1200 0487044500 6177616332   96   5   6 10714164143   0    0  17   10   1
                       98        1200 0    0    0  3356 1739 1265  16 329   0   0   0   0    0   0    0   2
                       98        1200 0482044500     0    0    0   0   0   1   1  16  32    0  16    0   3
                       99        1200 0492044500 6177613523   76   3   5  8427363416   0    0   0    0   1
                       99        1200 0    0    0  2691 1822  553  34 280  40   0   0   0    0   0    0   2
                       99        1200 0    0    0     0    0    0   0   1   1   2  60  20    0  60    0   3
                      100        1200 0497044500 61776 8101   29   2   2  33 8402115   0    0   0    0   1
                      100        1200 0    0    0   623  374   55  49 145   0   0   0   0    0   0    0   2
                      100        1200 0    0    0     0    0    0   0   0   0   2  65  25    0  65    0   3
                      101        1200 0502044500 61776 6882  102   5   6 11320162074   0    0   0    0   1
                      101        1200 0    0    0  2024 1312  541  32 140  20   0   0   0    0   0    0   2
                      101        1200 0    0    0     0    0    0   0   0   5  10  40  35    0  40    0   3
                      102        1200 0507044500 61776 4099   77   4   5  8712601138   0    1  10    2   1
                      102        1200 0    0    0   857  556  209  21  69   0   0   0   0    0   0    0   2
                      102        1200 0    0    0     0    0    0   0   0   0   0  75  25    0  75    0   3
                      103        1200 0512044500 6177613415   66   3   4  7423404010   0    0   0    0   1
                      103        1200 0    0    0  2205 1364  638  40 162   0   1   0   0    0   0    0   2
                      103        1200 0    0    0     0    0    0   0   0   5   5  30  20    0  30    0   3
                      104        1200 0517044500 6177611235  120   7   8 13450403784  10    0   0    0   1
                      104        1200 0    0    0  3213 2082 1005  21 105   0   1   0   0    0   0    0   2
                      104        1200 0517044500     0    0    0   0   0   0   0   0   3    0   0    0   3
                      121        1200 0487044450 61776 2276   11   0   1  12 420 626   0    0   0    0   1
                      121        1200 0    0    0  1031  343  636   2  50   0   0   0   0    0   0    0   2
                      121        1200 0487044450     0    0    0   0   0   0   0   0   2    0   0    0   3
                      122        1200 0492044450 6177622335  156   8   9 17349806156   0    0   0    0   1
                      122        1200 0    0    0  8826 5149 3138   8 532  10   0   0   0    0   0    0   2
                      122        1200 0    0    0     0    0    0   0   0   0   0   0   8    0   0    0   3
                      123        1200 0497044450 6177616800  105   5   7 11632164694   0    0   0    0   1
                      123        1200 0    0    0  2613 1494  517  43 559  65   1   0   0    0   0    0   2
                      123        1200 0    0    0     0    0    0   0   0   0   0   0  40    0   0   10   3
                      124        1200 0502044450 6177611351  115   7   8 12824003207   0    0   0    0   1
                      124        1200 0    0    0  1894 1423  132 101 234  10   1   0   0    0   0    0   2
                      124        1200 0    0    0     0    0    0   0   0   5  10  10  30    0  10   10   3
                      125        1200 0507044450 6177617975  293  15  13 33360364811   0    1  30    8   1
                      125        1200 0    0    0  7320 6796  304  27 193   0   0   0   0    0   0    0   2
                      125        1200 0    0    0     0    0    0   0   0   5  10  10  25    0  10   10   3
     OSI DATA MANAGEMENT UTILITY "PDSLIST"         VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)         PAGE       5
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS              VOL=STOR02   OPT: LN/PG=51              THOLD=10
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                         126      1200 0   0    0  7253 4249 2756  19 226   0   0   0   0   0   0   0   2
                         126      1200 0   0    0     0    0    0   0   0   5  10   0  25   0   0  10   3
                         127      1200 0517044450 61776 3675   30   2   2  3318601257  11   0   0   0   1
                         127      1200 0   0    0  5928 1021 4789   2 106  10   1   0   0   0   0   0   2
                         127      1200 0   0    0     0    0    0   0   0   5   5   0  80   0   0  15   3
                         128      1200 0522044450 61776  211    0   0   0   0  96  78  12   0   0   0   1
                         128      1200 0   0    0   918   82  817   0  18  30   1   0   0   0   0   0   2
                         128      1200 0522044450     0    0    0   0   0   0   0   0  20   0   0   0   3
                         146      1200 0497044400 6177612436  170   9  10 19025203817   0   0   0   0   1
                         146      1200 0   0    0  5763 3479 1617  25 634   0   0   0   0   0   0   0   2
                         146      1200 0497044400     0    0    0   0   0   0   0   0   5   0   0   0   3
                         147      1200 0502044400 6177617760  315  17  20 35130845573   0   0   0   0   1
                         147      1200 0   0    0  7131 5750  953  99 328   0   0   0   0   0   0   0   2
                         147      1200 0   0    0     0    0    0   0   0   0   5   0  55   0   0  10   3
                         148      1200 0507044400 6177635272  322  17  20 35883409635   1   1  10   2   1
                         148      1200 0   0    0  7549 5759 1288  55 447   0   0   0   0   0   0   0   2
                         148      1200 0   0    0     0    0    0   0   0   0   5   0  35   0   0   0   3
                         149      1200 0512044400 6177634481  165   9  12 18572969104  11   1  30   8   1
                         149      1200 0   0    0  7798 4436 2776   7 578   0   1   0   0   0   0   0   2
                         149      1200 0   0    0     0    0    0   0   0   0   2   0  10   0   0   0   3
                         150      1200 0517044400 61776  930    1   0   0   2 600 336  11   0   0   0   1
                         150      1200 0   0    0  3599  344 3159   0  87  60   1   0   0   0   0   0   2
                         150      1200 0   0    0     0    0    0   0   0   0   0   0  40   0   0  10   3
                         151      1200 0522044400 61776  238    0   0   0   0 108  87  12   0   0   0   1
                         151      1200 0   0    0  1033   92  919   0  20  30   1   0   0   0   0   0   2
                         151      1200 0   044400     0    0    0   0   2   0   0   0  90   0   0   0   3
                         171      1200 0502044350 6177619517  213  11  13 23724006461  10   0   0   0   1
                         171      1200 0   0    0  5793 3405 1740  30 616  30   1   0   0   0   0   0   2
                         171      1200 0502044350     0    0    0   0   2   0   0   0  40   0   0  10   3
                         172      1200 0507044350 6177623336  293  16  20 32742607257  19   0   0   0   1
                         172      1200 0   0    0  6826 2635 3698  32 460  20   1   0   0   0   0   0   2
                         172      1200 0   0    0     0    0    0   0   2   1   1   0  20   0   0  10   3
                         173      1200 0512044350 6177610950   70   4   4  7833603607  16   0   0   0   1
                         173      1200 0   0    0  7055 3310 3603  17 127  40   1   0   0   0   0   0   2
                         173      1200 0512044350     0    0    0   0   0   0   0   0   5   0   0   0   3
                         194      1200 0497044300 61776  216    5   0   0   6  36  86   0   0   0   0   1
                         194      1200 0   0    0   144   38  102   2   3   0   0   0   0   0   0   0   2
                         194      1200 0   0    0     0    0    0   0   0   0   0   0  10   0   0   0   3
                         195      1200 0502044300 61776 4761   86   5   6  96 7441755  16   0   0   0   1
                         195      1200 0   0    0  2622  949 1508  28 137   0   1   0   0   0   0   0   2
                         195      1200 0502044300     0    0    0   0   0   0   0   0  30   0   0   0   3
                         145      1200 0492044400     0  198    6   0   0   6  60  52   0   0   0   0   1
                         145      1200 0492044400   112   41   50   1  20   0   0   0   0   0   0   0   2
                         145      1200 0492044400                                                      3

               ***** END OF MEMBER 'BUCK' *****                                              249 LINE(S) IN THIS MEMBER
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.30          DATE: 01/27/83 (83027)          PAGE      6
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS                VOL=STOR02   OPT: LN/PG=51                 THOLD=10
   ------------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: BURL                                                                                                    -----------------
                                                  ALIASES: NONE
                 128      0640 0522044450 61776 2405   103   7   7 116 476 863   0   0   0   0   1
                 128      0640 0    0    0   538  177   386   0  25  10   0   0   0   0   0   0   2
                 128      0640 0522044450     0    0     0   0   0   2   2   0  15   5   0   4   3
                 129      0640 0527044450 61776  528    23   1   2  26 105 189   0   0   0   0   1
                 129      0640 0    0    0   129   39    85   0   5  30   0   0   0   0   0   0   2
                 129           0    0    0     0    0     0   0   0   0   2   0  15   0   0   2   3
                 149      0640 0512044400 61776 2225    31   2   2  34 363 739  11   0   0   0   1
                 149      0640 0    0    0   729  305   411   0  13   0   1   0   0   0   0   0   2
                 149           0512044400     0    0     0   0   0   0   0   0  10   0   0   0   3
                 150      0640 0517044400 61776 2902    78   4   5  87 693 960  11   0   0   0   1
                 150      0640 0    0    0  2203  400  1794   2   8  35   1   0   0   0   0   0   2
                 150           0    0    0     0    0     0   0   0   0   0   0  10   0   C   0   3
                 151      0640 0522044400 61776 9873   264  15  18 29819213245  12   0   0   0   1
                 151      0640 0    0    0  4122 2929   979  10 205  45   1   0   0   0   0   0   2
                 151           0    0    0     0    0     0   0   0   2   2  20  30   0   0   4   3
                 152      0640 0527044400 61776 2245    57   3   4  64 363 573   0   0   0   0   1
                 152      0640 0    0    0   906  810    70   1  25   0   0   0   0   0   0   0   2
                 152           0    0    0     0    0     0   0   0   5   5  45  45   0   0  10   3
                 153      0640 0532044400 61776 1492     9   0   0  10 165 428   0   0   0   0   1
                 153      0640 0    0    0   286  269     8   1   8   0   0   0   0   0   0   0   2
                 153           0    0    0     0    0     0   0   0  10   5  35  30   0   0  15   3
                 172      0640 0507044350 61776 4100    44   2   3  50 4291387  19   0   0   0   1
                 172      0640 0    0    0  2577 1726   665   7 178  20   1   0   0   0   0   0   2
                 172           0507044350     0    0     0   0   0   0   0   0  10  10   0   0   3
                 173      0640 0512044350 6177610658   111   5   6 12419473427  16   0   0   0   1
                 173      0640 0    0    0  6418 3208  2791   8 409  35   1   0   0   0   0   0   2
                 173           0    0    0     0    0     0   0   0   0   5   0  20   5   0   5   3
                 174      0640 0517044350 61776 3549   112   6   8 126 8381161   0   0   0   0   1
                 174      0640 0    0    0  2034 1074   914   2  45  20   0   0   0   0   0   0   2
                 174           0    0    0     0    0     0   0   0   5   5  30  60   0   0  10   3
                 175      0640 0522044350 61776 1685   181  11  13 206 363 500   0   0   0   0   1
                 175      0640 0    0    0   638  555    65   7  11  30   0   0   0   0   0   0   2
                 175           0    0    0     0    0     0   0   0   0   3  50  40   0   0   3   3
                 176      0640 0527044350 61776 1388    53   3   4  60 271 323   0   0   0   0   1
                 176      0640 0    0    0   555  508    29   2  16   0   0   0   0   0   0   0   2
                 176           0    0    0     0    0     0   0   5   3   5  55   0   0   0  13   3
                 177      0640 0532044350 61776 4827    27   1   1  30 3961538   0   0   0   0   1
                 177      0640 0    0    0   512  487    10   3  12   0   0   0   0   0   0   0   2
                 177           0532044350     0    0     0   0   5   3   5  40  40   0   0  13   3
                 194      0640 0497044300 61776 1061    13   1   1  14 264 382  10   0   0   0   1
                 194      0640 0    0    0  1134  507.  532   0  95   0   1   0   0   0   0   0   2
                 194           0497044300     0    0     0   0   0   0   0   0  10   0   0   0   3
                 195      0640 0502044300 6177619499    77   6   6 8637296360  17   0   0   0   1
                 195      0640 0    0    0  7223 4790  2245   8 165  50   1   0   0   0   0   0   2
                 195           0    0    0     0    0     0   0   0   0   0   0  20   0   0   0   3
                 196      0640 0507044300 6177643137   277  17  18 3086669999   0   0   0   0   1
                 196      0640 0    0    0  6936 6012   669  14 237  10   1   0   0   0   0   0   2
                 196           0    0    0     0    0     0   0   0   0   0   0  20   5   0   0   3
                 197      0640 0512044300 61776 8527   317  19  22 3571769263 2   0   0   0   0   1
                 197      0640 0    0    0  2858 2142   541   2 172   0   0   0   0   0   0   0   2
                 197           0    0    0     0    0     0   0   0   2   3  40  40   0   0   5   3
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.30         DATE: 01/27/83 (83027)          PAGE        7
  PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS              VOL=STOR02   OPT: LN/PG=51                  THOLD=10
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  MEMBER NAME: BURL      (CONT)                        ALIASES: NONE

198    0640 0517044300 61776 1568   60   3   4  68 403 478    0   0   0   0   1
198    0640 0   0    0   669  468  147   1  53   0   0   0    0   0   0   0   2
198         0   0    0     0    0    0   0   0   2   5  60   30   0   0   7   3
199    0640 0522044300 61776  756   44   2   3  50 198 231    0   0   2   0   1
199    0640 0   0    0   217  194   15   1   6  35   0   0    0   0   0   0   2
199         0   0    0     0    0    0   0   0   0   2  60   35   0   0   2   3
200    0640 0527044300 61776 1593   57   3   3  63 383 340    0  10   1   0   1
200    0640 0   0    0  3743 3715   13   4  12  10   0   0    0   0   0   0   2
200         0   0    0     0    0    0   0   5   3   5  50   30   0   0  13   3
201    0640 0532044300 61776 7054   67   3   3  73 5942181    0  30   2   0   1
201    0640 0   0    0  7340 7311    8   7  14  50   0   0    0   0   0   0   2
201         0   0    0     0    0    0   0  10   2   0  40   30   0   0  12   3
202    0640 0537044300 61776 4421   19   1   1  21 2311535    0  10   1   0   1
202    0640 0   0    0  2285 2274    3   1   7  10   0   0    0   0   0   0   2
202         0   0    0     0    0    0   0  20  10   5   5   20   0   0  35   3
218    0640 0492044250 61776    0    0   0   0   0   0   0    9   0   0   0   1
218    0640 0   0    0     0    0    0   0   0  70   1   0    0   0   0   0   2
218    0640 0492044250     0    0    0   0   0   0   0   0   10   0   0   0   3
219    0640 0497044250 6177621397  248  13  15 27642246366    9   0   0   0   1
219    0640 0   0    0  7402 4988 1795  13 594  40   1   0    0   0   0   0   2
219         0   0    0     0    0    0   0   0   3   5   0   10   0   0   8   3
220    0640 0502044250 6177617629  160   9  10 17922975287    0   0   0   0   1
220    0640 0   0    0  3399 2442  588   5 355   0   0   0    0   0  0.   0   2
220         0   0    0     0    0    0   0   0   2   3  30   10   0   0   5   3
221    0640 0507044250 6177614241  302  17  21 34025613651    0   0   0   0   1
221    0640 0   0    0  1269  960  160   8 140   0   1   0    0   0   0   0   2
221         0   0    0     0    0    0   0   0   3   5  25   10   5   0   8   3
222    0640 0512044250 61776 3705   94   5   6 105 7991101    0   0   0   0   1
222    0640 0   0    0  1766  967  570   3 226   0   0   0    0   0   0   0   2
222         0   0    0     0    0    0   0  30   5  10  35   15   0   0  45   3
223    0640 0517044250 6177616506  157   7   9 17231815345    0   0   0   0   1
223    0640 0   0    0  6256 4794 1324   3 137   0   0   0    0   0   0   0   2
223         0   0    0     0    0    0   0  10   5  10  35   10   0   0  25   3
224    0640 0522044250 61776 1625   25   1   2  28 356 505    0   0   0   0   1
224    0640 0   0    0   237  215   12   2   8   0   0   0    0   0   0   0   2
224         0   0    0     0    0    0   0   5   3   5  50   30   0   0  13   3
225    0640 0527044250 61776 4395   66   3   4  72 6271171    0  10   1   0   1
225    0640 0   0    0  6326 6271   30   8  17  30   0   0    0   0   0   0   2
225         0   0    0     0    0    0   0   0   3   5  30   40   0   0   8   3
226    0640 0532044250 61776 5462   29   1   2  31 3301849    0  30   2   0   1
226    0640 0   0    0  4083 4061    9   2  11   0   0   0    0   0   0   0   2
226         0   0    0     0    0    0   0  50   0   0   0   25   0   0  50   3
227    0640 0537044250 61776 4675   21   1   1  23 2641582    0   0   0   0   1
227    0640 0   0    0  2319 2308    2   0   8   0   0   0    0   0   0   0   2
227         0   0    0     0    0    0   0  65   5  10   0   15   0   0  80   3
244    0640 0497044200 6177621745  138   8   9 15328717029    0   0   0   0   1
244    0640 0   0    0  5435 3336 1598  26 425   0   0   0    0   0   0   0   2
244         0497044200     0    0    0   0   0   0   0   0    5   0   0   0   3
245    0640 0502044200 6177613525  459  24  29 51026865995    0   0   0   0   1
245    0640 0   0    0 12427 7531 4049 179 667   0   0   0    0   0   0   0   2
245         0   0    0     0    0    0   0   0   0   0   0   15   0   0   0   3
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)         PAGE      8
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS                 VOL=STOR02   OPT: LN/PG=51             THOLD=10
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MEMBER NAME: BURL       (CONT)                              ALIASES: NONE
                   246        0640 0507044200 61776 5617    96   5   6 107 5151666    0    0    0    0    1
                   246        0640 0   0    0  1665  941   610  11 100   0   0   0    0    0    0    0    2
                   246             0   0    0     0    0     0   0  10   5  10  60   13    0    0   25    3
                   247        0640 0512044200 61776 3456    56   3   4  62 6271125    0    0   48   60    1
                   247        0640 0   0    0  1834 1375   331   3 125   0   0   0    0    0    0    0    2
                   247             0   0    0     0    0     0   0   5   3   3  65   15    0    0    3    3
                   248        0640 0517044200 61776 2735    31   2   2  34 350 884    0    0    0    0    1
                   248        0640 0   0    0  1291  989   244   4  54   0   0   0    0    0    0    0    2
                   248             0   0    0     0    0     0   0  10   5  10  40   30    0    0   15    3
                   249        0640 0522044200 61776 3203    58   3   3  65 5941006    0    0    0    0    1
                   249        0640 0   0    0   350  274    39   5  29   0   0   0    0    0    0    0    2
                   249             0   0    0     0    0     0   0  10   5   5  55   20    0    0   15    3
                   250        0640 0527044200 61776 3620    68   3   4  75 6931114    0    0    0    0    1
                   250        0640 0   0    0   400  321    41   4  29   0   0   0    0    0    0    0    2
                   250             0   0    0     0    0     0   0  15   5  10  20   15   15    0   20    3
                   251        0640 0532044200 61776 3251    23   1   1  26 297 981    0    0    0    0    1
                   251        0640 0   0    0   292  253    15   3  19   0   0   0    0    0    0    0    2
                   251             0   0    0     0    0     0   0  80   0   0   0   20    0    0   80    3
                   252        0640 0537044200 61776 5571    31   1   2  34 4221724    0    0    0    0    1
                   252        0640 0   0    0   426  404     2   1  18   0   1   0    0    0    0    0    2
                   252             0   0    0     0    0     0   0  60   0   5   5   10   20    0   60    3
                   253        0640 0542044200 61776 3231    18   1   1  20 244 999    0    0    0    0    1
                   253        0640 0   0    0   247  233     1   1  11   0   0   0    0    0    0    0    2
                   253             0   0    0     0    0     0   0  10   0   5  20   10    0    0   10    3
                   270        0640 0497044150 61776  277     6   0   0   7  26  90    0    0    0    0    1
                   270        0640 0   0    0   120   73    37   0  10   0   0   0    0    0    0    0    2
                   270        0640 0   0    0     0    0     0   0   0   0   0   0    0    0    0    0    3
                   271        0640 0502044150 61776 8332   163   8  11 182 6802392    0    0    0    0    1
                   271        0640 0   0    0  2363 1278   883   4 198   0   0   0    0    0    0    0    2
                   271        0640 0502044150     0    0     0   0   0   2   3  10   25    0    0    5    3
                   272        0640 0507044150 61776 8564   118   6   8 133 5812737    0    0    0    0    1
                   272        0640 0   0    0  1035  773    74   8 178   0   0   0    0    0    0    0    2
                   272             0   0    0     0    0     0   0   0   2   3  65   20    0    0    5    3
                   273        0640 0512044150 61776 2674    27   1   2  30 172 820    0    0    0    0    1
                   273        0640 0   0    0   819  502   262   6  48   0   0   0    0    0    0    0    2
                   273             0   0    0     0    0     0   0  10   2   3  60   20    0    0   15    3
                   274        0640 0517044150 61776 1983    17   1   1  19 139 606    0    0    7    3    1
                   274        0640 0   0    0   394  254   108   4  28   0   0   0    0    0    0    0    2
                   274             0   0    0     0    0     0   0   5   2   0  65   20    0    0    7    3
                   275        0640 0522044150 61776 1973    15   1   1  16 145 600    0    0    4    2    1
                   275        0640 0   0    0   205  145    35   3  22   0   0   0    0    0    0    0    2
                   275             0   0    0     0    0     0   0  50  10   0  10   20   10    0   60    3
                   276        0640 0527044150 61776 2172    20   1   1  22 198 656    0    0    0    0    1
                   276        0640 0   0    0   220  161    34   3  22   0   0   0    0    0    0    0    2
                   276             0   0    0     0    0     0   0  70   5   5   0   10   10    0   80    3
                   277        0640 0532044150 61776 3120    26   1   2  29 290 937    0    0    0    0    1
                   277        0640 0   0    0   294  241    25   3  24   0   0   0    0    0    0    0    2
                   277             0   0    0     0    0     0   0  50  20  10   0   10   10    0   80    3
                   278        0640 0537044150 61776 1917    13   1   1  14 165 569    0    0    0    0    1
                   278        0640 0   0    0   189  170     4   2  12   0   0   0    0    0    0    0    2
                   278             0   0    0     0    0     0   0  60   5   5   0   10   10    0   70    3
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MEMBER NAME: BURL     (CONT)                    ALIASES: NONE
        279     0640 0542044150 61776 1447   10   0   1  11 132 424   0   0   0   0   1
        279     0640 0    0    0   154  139    4   1   9   0   0   0   0   0   0   0   2
        279          0    0    0     0    0    0   0  80   5   5   0   0   0   0  90   3
        298     0640 0502044100 61776  493    7   0   0   7  33 135   0   0   0   0   1
        298     0640 0    0    0    75   61    1   1  12   0   0   0   0   0   0   0   2
        298     0640 0    0    0     0    0    0   0   0   0   0   0   0   0   0   0   3
        299     0640 0507044100 61776 4219   55   3   3  62 2771151   0   0   0   0   1
        299     0640 0    0    0   663  527   32   7  97   0   0   0   0   0   0   0   2
        299          0507044100     0    0    0   0  30  10   5  20  10  15   0  45   3
        300     0640 0512044100 61776 7162   34   2   2  37 5152030   0   0   0   0   1
        300     0640 0    0    0   844  551  214   5  75   0   1   0   0   0   0   0   2
        300          0    0    0     0    0    0   0  40   5   5   5  10   5   0  50   3
        301     0640 0517044100 61776 5596   28   1   2  31 4161602   0   0   0   0   1
        301     0640 0    0    0   638  421  155   4  58   0   1   0   0   0   0   0   2
        301          0    0    0     0    0    0   0  30  20   5   0  10  20   0  55   3
        302     0640 0522044100 61776 1244    8   0   0   9 132 374   0   0   0   0   1
        302     0640 0    0    0    96   69   16   1  10   0   0   0   0   0   0   0   2
        302          0    0    0     0    0    0   0  30  40   5   0  10  10   0  75   3
        303     0640 0527044100 61776 1130    9   1   1  10 139 330   0   0   0   0   1
        303     0640 0    0    0   106   83   14   1   8   0   0   0   0   0   0   0   2
        303          0    0    0     0    0    0   0  50  10  10   0  10  15   0  70   3
        304     0640 0532044100 61776  221    6   0   0   7  66  34   0   0   0   0   1
        304     0640 0    0    0    93   89    4   1   0   0   0   0   0   0   0   0   2
        304          0    0    0     0    0    0   0  60  10   5   0   5  20   0  75   3
        305     0640 0537044100 61776  221    6   0   0   7  66  34   0   0   0   0   1
        305     0640 0    0    0    93   89    4   1   0   0   0   0   0   0   0   0   2
        305          0    0    0     0    0    0   0  70  10   5   0   5   5   0  85   3
        306     0640 0542044100 61776  221    6   0   0   7  66  34   0   0   0   0   1
        306     0640 0    0    0    93   89    4   1   0  40   0   0   0   0   0   0   2
        306          0    0    0     0    0    0   0  50  10   5   0  20  10   0  65   3
        326     0640 0507044050 61776 3721   49   3   3  54 2441016   0   0  34  35   1
        326     0640 0    0    0   588  466   31   6  86   0   0   0   0   0   0   0   2
        326          0507044050     0    0    0   0  30  20  10   0  20   5   0  60   3
        327     0640 0512044050 61776 2496   24   1   2  27 152 761   0   0   0   0   1
        327     0640 0    0    0   678  394  235   6  43   0   0   0   0   0   0   0   2
        327          0    0    0     0    0    0   0  60   5   0   0  10  25   0  65   3
        328     0640 0517044050 61776 1183   12   1   1  13 139 364   0   0   0   0   1
        328     0640 0    0    0   230  135   78   2  14   0   0   0   0   0   0   0   2
        328          0    0    0     0    0    0   0  60  10   0  10  10   5   0  70   3
        329     0640 0522044050 61776  650    4   0   0   5 139 195   0   0   0   0   1
        329     0640 0    0    0     6    6    0   0   0   0   0   0   0   0   0   0   2
        329          0    0    0     0    0    0   0  50   5  10  20  10   0   0  65   3
        330     0640 0527044050 61776  624    3   0   0   3 119 183   0   0   0   0   1
        330     0640 0    0    0     6    6    0   0   0   0   0   0   0   0   0   0   2
        330     0640 0    0    0     0    0    0   0  70   0  10   0  10  10   0  80   3
        331     0640 0532044050 61776  445    5   0   0   6  99 111   0   0   0   0   1
        331     0640 0    0    0    59   57    2   0   0  10   0   0   0   0   0   0   2
        331     0640 0    0    0     0    0    0   0  75   5   5   0  10   0   0  85   3
        332     0640 0537044050 61776  221    6   0   0   7  66  34   0   0   0   0   1
        332     0640 0    0    0    93   89    4   1   0  40   0   0   0   0   0   0   2
        332     0640 0    0    0     0    0    0   0  60   5  10   0  10  10   0  75   3
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"         VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)         PAGE      10
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS               VOL=STOR02   OPT: LN/PG=51              THOLD=10
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MEMBER NAME: BURL     (CONT)                      ALIASES: NONE
                   333       0640 0542044050 61776  221     6    0    0    7  66  34    0    0    0    0    1
                   333       0640 0    0    0    93   89     4    1    0    0   0   0    0    0    0    0    2
                   333       0640 0    0    0     0    0     0    0   50    5  10   0   10   25    0   65    3
                   334       0640 0547044050 61776  132     4    0    0    4  40  20    0    0    0    0    1
                   334       0640 0    0    0    56   54     2    0    0    0   0   0    0    0    0    0    2
                   334       0640 0    0    0     0    0     0    0   50    0   5   0    5    5    0   55    3
                   355       0640 0507044000 61776 1728    22    1    1   25 112 476    0    0    0    0    1
                   355       0640 0    0    0   289  221    26    3   39    0   0   0    0    0    0    0    2
                   355       0640 0507044000     0    0     0    0   10   10   0   5   10    0    0   20    3
                   356       0640 0512044000 61776  773     8    0    0    8  59 237    0    0    0    0    1
                   356       0640 0    0    0   194  113    67    2   12    0   0   0    0    0    0    0    2
                   356       0640 0    0    0     0    0     0    0   10    0   0   0    0   15    0   10    3
                   357       0640 0517044000 61776  398     4    0    0    5 106 127    0    0    0    0    1
                   357       0640 0    0    0     4    4     0    0    0    0   0   0    0    0    0    0    2
                   357       0640 0    0    0     0    0     0    0   50    0   0   0   10    5    0   50    3
                   358       0640 0522044000 61776  497     6    0    0    6 132 158    0    0    0    0    1
                   358       0640 0    0    0     5    5     0    0    0    0   0   0    0    0    0    0    2
                   358       0640 0    0    0     0    0     0    0   65    0   0   0   10   25    0   65    3
                   359       0640 0527044000 61776  610     5    0    0    5 139 186    0    0    0    0    1
                   359       0640 0    0    0     6    6     0    0    0   30   0   0    0    0    0    0    2
                   359       0640 0    0    0     0    0     0    0   50    0   0   0   10   40    0   50    3
                   360       0640 0532044000 61776  599     4    0    0    4 119 169    0    0    0    0    1
                   360       0640 0    0    0    24   23     1    0    0   30   0   0    0    0    0    0    2
                   360       0640 0    0    0     0    0     0    0   60    0   0   0   10   30    0   60    3
                   361       0640 0537044000 61776  321     4    0    0    5  86  76    0    0    0    0    1
                   361       0640 0    0    0    59   56     2    0    0    0   0   0    0    0    0    0    2
                   361       0640 0    0    0     0    0     0    0   50    0   0   0   20   30    0   50    3
                   362       0640 0542044000 61776  147     4    0    0    4  53  25    0    0    0    0    1
                   362       0640 0    0    0    57   55     2    0    0    0   0   0    0    0    0    0    2
                   362       0640 0    0    0     0    0     0    0   75    0   0   0    5   20    0   75    3
                   363       0640 0547044000 61776  179     4    0    0    4  73  33    0    0    0    0    1
                   363       0640 0    0    0    62   57     5    0    0    0   0   0    0    0    0    0    2
                   363       0640 0547044000     0    0     0    0   90    0   5   0    0    5    0   95    3
                   386       0640 0517043950 61776  124     1    0    0    2  33  40    0    0    0    0    1
                   386       0640 0    0    0     1    1     0    0    0    0   1   0    0    0    0    0    2
                   386       0640 0517043950     0    0     0    0    5    0   0   0    0    0    0    5    3
                   387       0640 0522043950 61776  313     3    0    0    4  92 100    0    0    0    0    1
                   387       0640 0    0    0     4    4     0    0    0   30   1   0    0    0    0    0    2
                   387       0640 0    0    0     0    0     0    0   30   10  10   0   10    0    0   50    3
                   388       0640 0527043950 61776  376     3    0    0    4 132 118    0    0    0    0    1
                   388       0640 0    0    0     3    3     0    0    0    0   0   0    0    0    0    0    2
                   388       0640 0    0    0     0    0     0    0   75   10  10   0    5    0    0   95    3
                   389       0640 0532043950 61776  162     1    0    0    1  73  49    0    0    0    0    1
                   389       0640 0    0    0     6    6     0    0    0    0   0   0    0    0    0    0    2
                   389       0640 0    0    0     0    0     0    0   60    0   0   0   20   20    0   60    3
                   390       0640 0537043950 61776   73     0    0    0    0  66  23    0    0    0    0    1
                   390       0640 0    0    0     6    6     0    0    0    0   0   0    0    0    0    0    2
                   390       0640 0    0    0     0    0     0    0   50   10   0   0   20   20    0   60    3
                   391       0640 0542043950 61776   89     0    0    0    0  66  34    0    0    0    0    1
                   391       0640 0    0    0    12    7     4    0    0    0   0   0    0    0    0    0    2
                   391       0640 0    0    0     0    0     0    0   60   10  10   0   10   10    0   80    3
```

```
   OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)        PAGE      11
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS             VOL=STOR02   OPT: LN/PG=51              THOLD=10
---------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: BURL     (CONT)                         ALIASES: NONE
                     392    0640 0547043950 61776  140    0    0    0    0   92   57    0    0    0    0    1
                     392    0640 0    0    0    22   12   10    0    0    0    0    0    0    0    0    0    2
                     392    0640 0    0    0     0    0    0    0   60   10   10    0   10   10    0   80    3
                     410    0640 0527043900 61776   51    0    0    0    0   46   16    0    0    0    0    1
                     410    0640 0    0    0     4    4    0    0    0    0    0    0    0    0    0    0    2
                     410    0640 0527043900      0    0    0    0   40   10    5    0    5    0    0   55    3
                     411    0640 0532043900 61776   73    0    0    0    0   66   23    0    0    0    0    1
                     411    0640 0    0    0     6    6    0    0    0    0    0    0    0    0    0    0    2
                     411    0640 0    0    0     0    0    0    0    0    0    0    0    0    0    0    0    2
                     411         0    0    0     0    0    0    0   70    5   10    0    0   10    0   85    3
                     412    0640 0537043900 61776   66    0    0    0    0   59   21    0    0    0    0    1
                     412    0640 0    0    0     5    5    0    0    0    0    0    0    0    0    0    0    2
                     412         0    0    0     0    0    0    0   55    5   10    0    5   25    0   70    3
                     413    0640 0542043900 61776  126    0    0    0    0   79   52    0    0    0    0    1
                     413    0640 0    0    0    21   10   10    0    0    0    0    0    0    0    0    0    2
                     413         0    0    0     0    0    0    0   55    5   10    0   10   20    0   70    3
                     414    0640 0547043900 61776  157    0    0    0    0   99   66    0    0    0    0    1
                     414    0640 0    0    0    26   13   13    0    0    0    0    0    0    0    0    0    2
                     414         0    0    0     0    0    0    0   85    5   10    0    0    0    0  100    3
                     432    0640 0527043850 61776   44    0    0    0    0   40   14    0    0    0    0    1
                     432    0640 0    0    0     4    4    0    0    0    0    0    0    0    0    0    0    2
                     432         0527043850      0    0    0    0   40    5    0    0    0    5    0   45    3
                     433    0640 0532043850 61776   58    0    0    0    0   53   19    0    0    0    0    1
                     433    0640 0    0    0     5    5    0    0    0    0    0    0    0    0    0    0    2
                     433         0    0    0     0    0    0    0   70    0    0    0   10   10    0   70    3
                     434    0640 0537043850 61776   79    0    0    0    0   66   27    0    0    0    0    1
                     434    0640 0    0    0     8    7    2    0    0    0    1    0    0    0    0    0    2
                     434         0    0    0     0    0    0    0   75    5    5    0    0   15    0   85    3
                     435    0640 0542043850 61776  140    0    0    0    0   92   57    0    0    0    0    1
                     435    0640 0    0    0    22   12   10    0    0    0    1    0    0    0    0    0    2
                     435         0    0    0     0    0    0    0   65    5   10    0    0   20    0   80    3
                     436    0640 0547043850 61776  157    0    0    0    0   99   66    0    0    0    0    1
                     436    0640 0    0    0    26   13   13    0    0    0    0    0    0    0    0    0    2
                     436         0    0    0     0    0    0    0   70   10    5    0    0   10    0   85    3
                     453    0640 0537043800 61776   36    0    0    0    0   33   12    0    0    0    0    1
                     453    0640 0    0    0     3    3    0    0    0    0    0    0    0    0    0    0    2
                     453         0537043800      0    0    0    0   40    0    0    0    5   20    0   40    3
                     454    0640 0542043800 61776  124    0    0    0    0   86   49    0    0    0    0    1
                     454    0640 0    0    0    18   10    8    0    0    0    1    0    0    0    0    0    2
                     454         0    0    0     0    0    0    0   30    0    0    0    0   55    0   30    3
                     455    0640 0547043800 61776  157    0    0    0    0   99   66    0    0    0    0    1
                     455    0640 0    0    0    26   13   13    0    0    0    0    0    0    0    0    0    2
                     455         0    0    0     0    0    0    0   45    5   10    0    0   40    0   60    3
      ***** END OF MEMBER 'BURL' *****                                            298 LINE(S) IN THIS MEMBER
```

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     OSI DATA MANAGEMENT UTILITY "PDSLIST"             VER 3-4     TIME:  16.49.30          DATE: 01/27/83 (83027)          PAGE      12
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS                   VOL=STOR02   OPT: LN/PG=51                   THOLD=10
   -------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: CAMD
                                               ALIASES: NONE
          218        0740 0492044250 61776  982    51   2   3  55  59  31    9   0   0   0   1
          218        0740 0   0    0  3574 1832  1478   0 264  20   1   0    0   0   0   0   2
          218        0740 0492044250     0    0     0   0   0   0   0   0    5   0   0   0   3
          219        0740 0497044250 61776  194    43   2   2  47  33   5    9   0   0   0   1
          219        0740 0   0    0  3092 1391  1401   1 299   0   1   0    0   0   0   0   2
          219        0740 0   0    0     0    0     0   0   0   0   0   0    5   0   0   0   3
          242        0740 0487044200 6177629416   211  17  18 234 873 910   18   0   0   0   1
          242        0740 0   0    0  28644170241115   3 500  20   1   0    0   0   0   0   2
          242        0740 0487044200     0    0     0   0   0   0   0   0    5   0   0   0   3
          243        0740 0492044200 6177656787   366  20  23 40310691914    4   0   0   0   1
          243        0740 0   0    0 2295014881  6200  181852  60   1   0    0   0   0   0   2
          243        0740 0   0    0     0    0     0   0   0   0   0   0    5   0   0   0   3
          244        0740 0497044200 6177610842   223  11  13 247 196 320    0   0   0   0   1
          244        0740 0   0    0 10145 7166  2127  14 839  10   0   0    0   0   0   0   2
          244        0740 0   0    0     0    0     0   0   0   0   0   0   10   0   0   0   3
          245        0740 0502044200 61776    0     0   0   0   0   0   0    0   0   0   0   1
          245        0740 0   0    0     0    0     0   0   0   0   0   0    0   0   0   0   2
          245        0740 0   0    0     0    0     0   0   0   0   0   0    0   0   0   0   3
          268        0740 0487044150 6177640225   402  21  27 443 9691366   15   0   0   0   1
          268        0740 0   0    0 13118 7494  5184   1 437  20   1   0    0   0   0   0   2
          268        0740 0487044150     0    0     0   0   0   0   0   0    0   0   0   0   3
          269        0740 0492044150 6177658734   575  29  37 63712952147    0   0   0   0   1
          269        0740 0   0    0 2236517213  3736 1411277  20   1   0    0   0   0   0   2
          269        0740 0   0    0     0    0     0   0   0   0   0   0    5   0   0   0   3
          270        0740 0497044150 6177633347   473  24  31 529 5921022    0   0   0   0   1
          270        0740 0   0    0 1557213066  1220  141275   0   0   0    0   0   0   0   2
          270        0740 0   0    0     0    0     0   0   0   5   0   0   10   0   0   5   3
          271        0740 0502044150 61776 7794   105   5   6 116  96 200    0   0   0   0   1
          271        0740 0   0    0  3585 1760  1535   5 284   0   0   0    0   0   0   0   2
          271        0740 0   0    0     0    0     0   0   0   5   0   5   10   0   0   5   3
          295        0740 0487044100 6177615680   316  17  21 354 322 494    4   0   0   0   1
          295        0740 0   0    0  2618 1570   798   1 251   0   0   0    0   0   0   0   2
          295        0740 0487044100     0    0     0   0   0   0   0   0    5   0   0   0   3
          296        0740 0492044100 6177648769   680  39  46 75610431574    0   0   0   0   1
          296        0740 0   0    0 11305 7622  2927  18 733  20   0   0    0   0   0   0   2
          296        0740 0   0    0     0    0     0   0   0   0   0   0    0   0   0   0   3
          297        0740 0497044100 6177627666   277  14  17 309 503 785    0   0   0   0   1
          297        0740 0   0    0  6161 4669   757  23 708  15   0   0    0   0   0   0   2
          297        0740 0   0    0     0    0     0   0   0   5   0   5    5   0   0   5   3
          298        0740 0502044100 6177615094    58   3   3  64 122 380    0   0   0   0   1
          298        0740 0   0    0  1923 1446   229   0 247   0   0   0    0   0   0   0   2
          298        0740 0   0    0     0    0     0   0  30  15  15  10   10   0   0  60   3
          299        0740 0507044100 61776    0     0   0   0   0   0   0    0   0   0   0   1
          299        0740 0   0    0     0    0     0   0   0   0   0   0    0   0   0   0   2
          299        0740 0   0    0     0    0     0   0   0   0   0   0    0   0   0   0   3
          323        0740 0492044050 6177623632   196  10  14 219 240 739    0   0   0   0   1
          323        0740 0   0    0  2843 1520   835   1 486   0   0   0    0   0   0   0   2
          323        0740 0492044050     0    0     0   0   0   5   5   5   30   0   0  10   3
          324        0740 0497044050 6177644355   207  12  14 230 6071388    0   0   0   0   1
          324        0740 0   0    0  5520 4811   301  15 397  30   1   0    0   0   0   0   2
          324        0740 0   0    0     0    0     0   0   0   0   5  10   10   0   0   5   3
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---------------------------------------------------------------------------------------------------------------

MEMBER NAME: CAMD     (CONT)                              ALIASES: NONE

                           325       0740 0502044050 6177616555   99   5   6 111 192 485   0   0   0   0   1
                           325       0740 0   0    0  2593 1960  368   4 263  20   1   0   0   0   0   0   2
                           325       0740 0   0    0     0    0    0   0  20  10  10   5  15   0   0  40   3
                           326       0740 0507044050 61776 1646    9   0   1  10  15  47   0   0   0   0   1
                           326       0740 0   0    0   211  163   14   0  34   0   0   0   0   0   0   0   2
                           326       0740 0   0    0     0    0    0   0  10   0   5   0   5   0   0  15   3
                           352       0740 0492044000 61776 5030   62   4   4  70 104 105   0   0   0   0   1
                           352       0740 0   0    0  2004 1869   70   2  64   0   0   0   0   0   0   0   2
                           352       0740 0492044000     0    0    0   0  30  30  15  10   5   0   0  75   3
                           353       0740 0497044000 61776 9844  102   6   7 114 104 291   0   0   0   0   1
                           353       0740 0   0    0  1747 1347  184   4 211   0   1   0   0   0   0   0   2
                           353       0740 0   0    0     0    0    0   0  45  10   5  10  20   0   0  60   3
                           354       0740 0502044000 6177611128  110   6   7 122 124 330   0   0  21  10   1
                           354       0740 0   0    0  2983 1721 1088   4 168  50   1   0   0   0   0   0   2
                           354       0740 0   0    0     0    0    0   0  30   5   5  10  20   5   0  40   3
                           355       0740 0507044000 61776 6545  110   6   7 123 106 192   0   0   0   0   1
                           355       0740 0   0    0  1556  798  330  12 415  50   0   0   0   0   0   0   2
                           355       0740 0   0    0     0    0    0   0  40  10   0  10  10   5   0  50   3
                           356       0740 0512044000 61776  347    3   0   0   3  11  10   0   0   0   0   1
                           356       0740 0   0    0    18   11    5   0   1   0   0   0   0   0   0   0   2
                           356       0740 0512044000     0    0    0   0  40   5   0  10  10  15   0  45   3
                           357       0740 0517044000 61776  116    1   0   0   1   4   3   0   0   0   0   1
                           357       0740 0   0    0     6    4    2   0   0   0   0   0   0   0   0   0   2
                           357       0740 0   0    0     0    0    0   0   5   5   0   0   5   5   0  70   3
                           382       0740 0497043950 61776 2378   56   3   4  63  41  87   0   0   0   0   1
                           382       0740 0   0    0   628  242  257   1 126   0   0   0   0   0   0   0   2
                           382       0740 0497043950     0    0    0   0  20   5   0  15   5   0   0  25   3
                           383       0740 0502043950 61776 2281   28   2   2  31  20  70   0   0   0   0   1
                           383       0740 0   0    0   413  119  273   1  16  10   0   0   0   0   0   0   2
                           383       0740 0   0    0     0    0    0   0  30  10   5  10   5  10   0  40   3
                           384       0740 0507043950 61776 3915   46   3   3  51 101 115   0   0   0   0   1
                           384       0740 0   0    0   347  185  148   1  11  40   0   0   0   0   0   0   2
                           384       0740 0   0    0     0    0    0   0  30   5   0  15   5   0   0  35   3
                           385       0740 0512043950 61776  931    7   0   0   7  24  28   0   0   0   0   1
                           385       0740 0   0    0    70   41   25   0   3  20   0   0   0   0   0   0   2
                           385       0740 0   0    0     0    0    0   0  30  10  10  25   5  10   0  40   3
                           386       0740 0517043950 61776  579    4   0   0   5  19  18   0   0   0   0   1
                           386       0740 0   0    0    30   19    9   0   2  30   0   0   0   0   0   0   2
                           386       0740 0   0    0     0    0    0   0  50   5   5  10   5  25   0  55   3
                           387       0740 0522043950 61776    0    0   0   0   0   0   0   0   0   0   0   1
                           387       0740 0   0    0     0    0    0   0   0   0   0   0   0   0   0   0   2
                           387       0740 0   0    0     0    0    0   0   0   0   0   0   0 100   0   0   3
                           406       0740 0497043900 61776  173    2   0   0   3   1   5   0   0   0   0   1
                           406       0740 0   0    0    33    8   24   0   1   0   0   0   0   0   0   0   2
                           406       0740 0   0    0     0    0    0   0   0   0   0   0   0   0   0   0   3
                           407       0740 0502043900 61776 1038   15   1   1  16   9  32   0   0   0   0   1
                           407       0740 0   0    0   200   46  144   1   8   0   0   0   0   0   0   0   2
                           407       0740 0502043900     0    0    0   0  10  16   0   0   5   5   0  10   3
                           408       0740 0507043900 61776 4035  109   6   7 123  65  86   0   0   0   0   1
                           408       0740 0   0    0   404  135  249   1  15  30   0   0   0   0   0   0   2
                           408       0740 0   0    0     0    0    0   0  20   5   5  25  15  20   0  30   3
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    OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)         PAGE     14
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS               VOL=STOR02   OPT: LN/PG=51               THOLD=10
  ------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: CAMD     (CONT)                    ALIASES: NONE
                 409      0740 0512043900 61776 3340    69    3    4   78   55   77    0    0    0    0    1
                 409      0740 0    0    0   298  161   124    1    9   60    0    0    0    0    0    0    2
                 409      0740 0    0    0     0    0     0    0   30   15   10   25   10    0    0   55    3
                 430      0740 0507043850 61776 1557    22    1    1   25   13   48    0    0    0    0    1
                 430      0740 0    0    0   300   69   216    1   13   30    0    0    0    0    0    0    2
                 430      0740 0507043850      0    0     0    0   25    5    5   15    5   10    0   35    3
                 431      0740 0512043850 61776 1259    15    1    1   16   11   39    0    0    0    0    1
                 431      0740 0    0    0   224   69   144    1    9   20    0    0    0    0    0    0    2
                 431      0740 0    0    0     0    0     0    0   20   10    0   10    5    0    0   30    3
                 452      0740 0507043300 61776  173     2    0    0    3    1    5    0    0    0    0    1
                 452      0740 0    0    0    33    8    24    0    1    5    0    0    0    0    0    0    2
                 452           0507043800      0    0     0    0    5    0    0    0    0    0    0    5    3
     ***** END OF MEMBER 'CAMD' *****                                                       114 LINE(S) IN THIS MEMBER
    OSI DATA MANAGEMENT UTILITY "PDSLIST"         VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)        PAGE     15
 PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS            VOL=STOR02   OPT: LN/PG=51              THOLD=10
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 MEMBER NAME: CHEST                            ALIASES: NONE
   88      1660 0437044500 61776 2092     5    1    1   7 979 712    0    0    0    0    1
   88      1660 0   0    0   121   51    12    0   57   0   1   0    0    0    0    0    2
   88      1660 0437044500     0    0     0    0    5  25  40   0   30    0    0    0    3
   89      1660 0442044500 61776 5624    65    4    5  7426891925    0    0    0    0    1
   89      1660 0   0    0   904  690    90   13  110   0   1   0    0    0    0    0    2
   89      1660 0442044500     0    0     0    0    0   5  10  25   45    0   25    0    3
   90      1660 0447044500 61776 1671    20    1    1  22 747 524    0    0    0    0    1
   90      1660 0   0    0   238  145    72    4   18   0   1   0    0    0    0    0    2
   90      1660 0447044500     0    0     0    0    0   3   5  25   20    0   25    0    3
   91      1660 0452044500 61776  455     5    0    0   6 498   0    0    0    0    0    1
   91      1660 0   0    0     0    0     0    0    0   0   0   0    0    0    0    0    2
   91           0452044500     0    0     0    0    0   0   0   0    1    0    0    0    3
  109      1660 0427044450 61776  594    17    1    1  191428 185    0    0    0    0    1
  109      1660 0   0    0   911  122   732    0   56   0   0   0    0    0    0    0    2
  109      1660 0427044450     0    0     0    0    5  30  50   0   10    0    0    0    3
  110      1660 0432044450 61776  674     5    0    0   6 747 215    0    0    0    0    1
  110      1660 0   0    0    61   31    16    0   13   0   0   0    0    0    0    0    2
  110      1660 0   0    0     0    0     0    0    5  25  40  10   20    0   10    0    3
  111      1660 0437044450 61776  824    21    1    1  241096 261    0    0    0    0    1
  111      1660 0   0    0   140   97    15    4   25   0   0   0    0    0    0    0    2
  111      1660 0   0    0     0    0     0    0    2  20  35  15   25    0   15    0    3
  112      1660 0442044450 61776 1859    36    2    2  401544 591    0    0    0    0    1
  112      1660 0   0    0   675  557    45   27   47   0   0   0    0    0    0    0    2
  112      1660 0   0    0     0    0     0    0    0  10  10  45   30    0   45    0    3
  113      1660 0447044450 61776 2400    21    1    1  231245 761    0    0    0    0    1
  113      1660 0   0    0  1154  986    75   49   43   0   0   0    0    0    0    0    2
  113      1660 0   0    0     0    0     0    0    0   0   5  60   30    0   60    0    3
  114      1660 0452044450 61776 6129    66    3    3  7334031788    0    0    0    0    1
  114      1660 0   0    0  4758 2278  2343   54   84   0   1   0    0    0    0    0    2
  114      1660 0   0    0     0    0     0    0    0   0   3   5   15    0    5    0    3
  115      1660 0457044450 61776    0     0    0    0   0   0   0    0    0    0    0    1
  115      1660 0   0    0     0    0     0    0    0   0   0   0    0    0    0    0    2
  115      1660 0457044450     0    0     0    0    0   0   0   0    1    0    0    0    3
  131      1660 0422044400 61776  826     7    0    0   8 448 252    0    0    0    0    1
  131      1660 0   0    0    92   55    14    3   20   0   0   0    0    0    0    0    2
  131      1660 0422044400     0    0     0    0    0  25  40  15   20    0   15    5    3
  132      1660 0427044400 61776  925    60    3    5  681477 246    0    0    0    0    1
  132      1660 0   0    0   431   83   319    2   27   0   0   0    0    0    0    0    2
  132      1660 0   0    0     0    0     0    0    0  20  30  15   30    0   15   16    3
  133      1660 0432044400 61776  574    14    1    1  16 847 175    0    0    0    0    1
  133      1660 0   0    0    29   16     3    1    9   0   0   0    0    0    0    0    2
  133      1660 0   0    0     0    0     0    0    2  15  25  30   25    0   30    0    3
  134      1660 0437044400 61776  678    12    1    1  13 963 218    0    0    0    0    1
  134      1660 0   0    0    38   20     7    0   11   0   0   0    0    0    0    0    2
  134      1660 0   0    0     0    0     0    0    2  10  20  10   50    0   10    0    3
  135      1660 0442044400 61776  953    12    1    1  14 880 296    0    0    0    0    1
  135      1660 0   0    0   140  102    16    4   18   0   0   0    0    0    0    0    2
  135      1660 0   0    0     0    0     0    0    0  10  20  40   20    0   40    0    3
  136      1660 0447044400 61776 1998    15    1    1  161096 600    0    0    0    0    1
  136      1660 0   0    0   564  426    49   25   64   0   0   0    0    0    0    0    2
  136      1660 0   0    0     0    0     0    0    0   5  10  60   20    0   60    0    3
 ------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: CHEST     (CONT)                 ALIASES: NONE

                137        1660 0452044400 6177617836  122    7    8 13691305852    0    0    0    0    1
                137        1660 0    0    0  9483 4877 4336   26  242    0   1   0    0    0    0    0    2
                137        1660 0    0    0     0    0    0    0    0    2   3  35   20    0   35    0    3
                138        1660 0457044400 61776 1425   16    1    1   18 498 425    0    0    0    0    1
                138        1660 0    0    0   454  170  274    1    9    0   1   0    0    0    0    0    2
                138        1660 0457044400     0    0    0    0    0    1   1   3   20    0    0    0    3
                154        1660 0417044350 61776  922    9    0    0   10 664 277    0    0    0    0    1
                154        1660 0    0    0   157  117   18    2   19    0   0   0    0    0    0    0    2
                154        1660 0417044350     0    0    0    0    0    0   0  40    5    0    0    0    3
                155        1660 0422044350 61776 2138   27    1    1   291909 665    0    0    0    0    1
                155        1660 0    0    0   464  372   47    4   42    0   0   0    0    0    0    0    2
                155        1660 0    0    0     0    0    0    0    0    5  10  60   20    0    0   10    3
                156        1660 0427044350 61776 1647   48    3    3   541328 460    0    0    0    0    1
                156        1660 0    0    0   178  124   10    4   40    0   0   0    0    0    0    0    2
                156        1660 0    0    0     0    0    0    0    0   15  30  30   20    0    0    5    3
                157        1660 0432044350 61776 1411   10    1    1   111311 381    0    0    0    0    1
                157        1660 0    0    0   109   68    3    3   35    0   0   0    0    0    0    0    2
                157        1660 0    0    0     0    0    0    0    2   10  25  10   50    0    0    0    3
                158        1660 0437044350 61776 1142   78    5    6   881328 333    0    0    0    0    1
                158        1660 0    0    0   166  125   31    0   11    0   0   0    0    0    0    0    2
                158        1660 0    0    0     0    0    0    0    0    5  10  50   30    0    0    0    3
                159        1660 0442044350 61776 2308   39    2    3   441494 679    0    0    0    0    1
                159        1660 0    0    0   274  190   47   18   20    0   0   0    0    0    0    0    2
                159        1660 0    0    0     0    0    0    0    0    5  10  65   20    0    0    0    3
                160        1660 0447044350 61776 1927   89    5    7  1001693 583    0    0    0    0    1
                160        1660 0    0    0   373  198   82   29   63    0   0   0    0    0    0    0    2
                160        1660 0    0    0     0    0    0    0    0    5  10  65   20    0    0    0    3
                161        1660 0452044350 61776 2443  140    8   10  1591494 708    0    0    0    0    1
                161        1660 0    0    0  1441  603  750    4   83    0   0   0    0    0    0    0    2
                161        1660 0    0    0     0    0    0    0    0   15  20  50   15    0    0    0    3
                162        1660 0457044350 61776 3877   65    3    4   7415271109    0    0    0    0    1
                162        1660 0    0    0  1480  508  941    7   24    0   1   0    0    0    0    0    2
                162        1660 0    0    0     0    0    0    0    5   20  30  30   13    1    0    0    3
                163        1660 0462044350 61776 4436  205   11   13 23016601451    0    0    0    0    1
                163        1660 0    0    0  1220  794  420    1    5   30   1   0    0    0    0    0    2
                163        1660 0    0    0     0    0    0    0    0    1   2   5   15    0    0   10    3
                164        1660 0467044350 61776  414    3    0    0    3  83 128    0    0    0    0    1
                164        1660 0    0    0    55   36    2    7   10    0   0   0    0    0    0    0    2
                164        1660 0467044350     0    0    0    0    0   35  50   0    0    0    0    0    3
                178        1660 0417044300 61776  448    3    0    0    3 216 131    0    0    0    0    1
                178        1660 0    0    0    23   19    2    0    6    0   0   0    0    0    0    0    2
                178        1660 0417044300     0    0    0    0    0   20  25   0    6    0    0    0    3
                179        1660 0422044300 61775 1551    9    0    0    9 747 455    0    0    0    0    1
                179        1660 0    0    0    87   62    4    0   20    0   0   0    0    0    0    0    2
                179        1660 0    0    0     0    0    0    0    0   30  45  10   15    0    0    0    3
                180        1660 0427044300 61776 1781   26    1    1   29 946 540    0    0    0    0    1
                180        1660 0    0    0   241  177    5    3   57    0   0   0    0    0    0    0    2
                180        1660 0    0    0     0    0    0    0    0   20  30  30   18    0    0   16    3
                181        1660 0432044300 61776 2369   19    1    1   211228 683    0    0    0    0    1
                181        1660 0    0    0   257  191   18    5   44    0   0   0    0    0    0    0    2
                181        1660 0    0    0     0    0    0    0    0    3   5  50   40    0    0    0    3
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MEMBER NAME: CHEST    (CONT)                 ALIASES: NONE

182      1660 0437044300 61776 3448   44   3    3  491577 966   0   0   0   0   1
182      1660 0   0    0   740  410  268   3   59   0   0   0   0   0   0   0   2
182      1660 0   0    0     0    0    0   0    0  20  30  10  35   0   0   0   3
183      1660 0442044300 61776 6056   75   4    5  8419921700   0   0   0   0   1
183      1660 0   0    0  1352  763  498   2   90  10   0   0   0   0   0   0   2
183           0   0    0     0    0    0   0    0  10  20  30  25   0   0   0   3
184      1660 0447044300 61776 6223  163  10   11 18429051691   0   0   0   0   1
184      1660 0   0    0  3442 1548 1667   8  218  90   1   0   0   0   0   0   2
184           0   0    0     0    0    0   0    0  15  25   5  40   0   0  10   3
185      1660 0452044300 61776 8498  113   6    7 12740342407   0   0   0   0   1
185      1660 0   0    0  4263 2129 1831  22  280  90   1   0   0   0   0   0   2
185           0   0    0     0    0    0   0    0  15  20  15  30   0   0  10   3
186      1660 0457044300 6177613956  192   9   12 21264744175   0   0   0   0   1
186      1660 0   0    0  8547 6301 1610  70  568  60   1   0   0   0   0   0   2
186           0   0    0     0    0    0   0    0  15  30   5  20   0   0  10   3
187      1660 0462044300 6177612208   96   5    5 10632703614   0   0   0   0   1
187      1660 0   0    0  3679 2938  164 184  393  10   0   0   0   0   0   0   2
187           0   0    0     0    0    0   0    0  15  25   0  10   0   0   5   3
188      1660 0467044300 61776  828    5   0    0   6 166 256   0   0   0   0   1
188      1660 0   0    0   111   73    4  14   20   0   0   0   0   0   0   0   2
188           0467044300     0    0    0   0    0   1   1   0   5   0   0   0   3
203      1660 0417044250 61776 1411   34   2    2  381411 447   0   0   0   0   1
203      1660 0   0    0   301   93  184   0   20   0   0   0   0   0   0   0   2
203           0417044250     0    0    0   0    5  20  30   0  30   0   0   0   3
204      1660 0422044250 61776 2880   33   2    2  371494 909   0  19 315 356   1
204      1660 0   0    0   845  353  297   9  180   0   1   0   0   0   0   0   2
204           0   0    0     0    0    0   0    0  10  20  10  55   0   0   0   3
205      1660 0427044250 6177617154  129   8    9 14593295726   0   2  35  30   1
205      1660 0   0    0 11565 5667 5377  19  494  90   1   0   0   0   0   0   2
205      1660 0   0    0     0    0    0   0    0  10  20  20  30   0   0  10   3
206      1660 0432044250 61776 6327  100   6    6 11234531766   0   1  22   2   1
206      1660 0   0    0  2112 1800  247   2   64  90   1   0   0   0   0   0   2
206      1660 0   0    0     0    0    0   0    0  10  20  20  35   0   0  10   3
207      1660 0437044250 6177610713  128   7    8 14348143507   0   1  22   2   1
207      1660 0   0    0  7843 2766 4442   7  629  90   1   0   0   0   0   0   2
207      1660 0   0    0     0    0    0   0    5  20  30  25  10   0   0  10   3
208      1660 0442044250 61776 4616   68   4    5  7719921263   0   0   0   0   1
208      1660 0   0    0  1104  610  409   8   77  90   1   0   0   0   0   0   2
208      1660 0   0    0     0    0    0   0    0  20  30  10  30   0   0  10   3
209      1660 0447044250 61776 8781   83   5    6  9527392522   0   0  63  26   1
209      1660 0   0    0  1606  947  464  51  143   0   1   0   0   0   0   0   2
209      1660 0   0    0     0    0    0   0    0   5  15  20  30   0   0   0   3
210      1660 0452044250 61776 6403   40   2    3  4416931900   0   0   0   0   1
210      1660 0   0    0   511  411   29  12   59   0   1   0   0   0   0   0   2
210      1660 0   0    0     0    0    0   0    0   5  15  40  30   0   0   0   3
211      1660 0457044250 61776 2447   55   3    3  611411 663   0   0   0   0   1
211      1660 0   0    0   222  150    1   6   66   0   0   0   0   0   0   0   2
211      1660 0   0    0     0    0    0   0    0  15  25  35  25   0   0   0   3
212      1660 0462044250 61776  998   15   1    1  16 415 260   0   0   0   0   1
212      1660 0   0    0    79   44    0   2   33   0   0   0   0   0   0   0   2
212           0462044250     0    0    0   0    0   3   5   0   2   0   0   0   3
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      OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)        PAGE     18
   PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS             VOL=STOR02   OPT: LN/PG=51             THOLD=10
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   MEMBER NAME: CHEST     (CONT)
                                                   ALIASES: NONE
                        228   1660 0417044200 61776 4015   55  3   3  6242331312  0 10  1  0  1
                        228   1660 0    0    0  951  458  386  1 103  30  1   0   0  0  0  0  2
                        228        0417044200    0    0    0  0   0  10 15  30  40  0  0 10  3
                        229   1660 0422044200 61775 3005   33  2   2  381992 970   0  0  0  0  1
                        229   1660 0    0    0  797  365  316  6 107  80  1   0   0  0  0  0  2
                        229        0    0    0    0    0    0  0   0  15 20  30  35  0  0 10  3
                        230   1660 0427044200 61776 3659   26  2   2  2936851106   0  0  0  0  1
                        230   1660 0    0    0  689  348  270  5  65  20  1   0   0  0  0  0  2
                        230        0    0    0    0    0    0  0   0  10 15  30  45  0  0  5  3
                        231   1660 0432044200 61776 2281    8  1   1    91162 679   0  0 10  1  1
                        231   1660 0    0    0  160   99   13 14  34  40  1   0   0  0  0  0  2
                        231        0    0    0    0    0    0  0   0  10 15  20  50  0  0  5  3
                        232   1660 0437044200 61776 1906   12  1   1  142407 584   0  0  0  0  1
                        232   1660 0    0    0  860  798   12 10  40  20  1   0   0  0  0  0  2
                        232        0    0    0    0    0    0  0   0   5 10  25  50  0  0  0  3
                        233   1660 0442044200 61776 2439   17  1   1  19 996 724   0  0  0  0  1
                        233   1660 0    0    0  298  223   38  5  31   0  0   0   0  0  0  0  2
                        233        0    0    0    0    0    0  0   0   0  0  45  50  0  0  0  3
                        234   1660 0447044200 6177631817  183  9  11  20597943945  0  0  0  0  1
                        234   1660 0    0    0 1566110648 4128 35 852  30  0   0   0  0  0  0  2
                        234        0    0    0    0    0    0  0   0   5 10  15  35  0  0  0  3
                        235   1660 0452044200 61776 7215   70  3   5  7822082130   0  0  0  0  1
                        235   1660 0    0    0 1107  617  313 11 167  10  0   0   0  0  0  0  2
                        235        0    0    0    0    0    0  0   0   5 10  25  30  0  0  0  3
                        236   1660 0457044200 61776  400   21  1   1  24 415 121   0  0  0  0  1
                        236   1660 0    0    0   41   21    0  2  18   0  0   0   0  0  0  0  2
                        236        0457044200    0    0    0  0   0   2  3   5  10  0  0  0  3
                        254   1660 0417044150 61776 1623   12  1   1  141361 464   0  0  0  0  1
                        254   1660 0    0    0  239  187   13  5  34   0  0   0   0  0  0  0  2
                        254        0417044150    0    0    0  0   0   2  3  45  45  0  0  0  3
                        255   1660 0422044150 61776  702    9  1   1  10 996 193   0  0  0  0  1
                        255   1660 0    0    0   55   34   14  6   0   0  0   0   0  0  0  0  2
                        255        0    0    0    0    0    0  0   0   2  8  45  45  0  0  0  3
                        256   1660 0427044150 61776  850   10  1   1  111062 252   0  0  0  0  1
                        256   1660 0    0    0   32   24    2  4   2  40  0   0   0  0  0  0  2
                        256        0    0    0    0    0    0  0   0   2  8  35  55  0  0 10  3
                        257   1660 0432044150 61776 1027    5  1   1   6 996 282   0  0  0  0  1
                        257   1660 0    0    0  149   91   25 25   8   0  0   0   0  0  0  0  2
                        257   1660 0    0    0    0    0    0  0   0   5 10  40  45  0  0  0  3
                        258   1660 0437044150 61776 1646   12  1   1  131461 435   0  0  0  0  1
                        258   1660 0    0    0  479  382   42 39  16  30  0   0   0  0  0  0  2
                        258   1660 0    0    0    0    0    0  0   0  10 20  30  35  0  0  0  3
                        259   1660 0442044150 61776 2078   51  2   3  561826 533   0  0  0  0  1
                        259   1660 0    0    0 1015  981   23  1  11  40  1   0   0  0  0  0  2
                        259   1660 0    0    0    0    0    0  0   0   5  5  25  60  0  0  5  3
                        260   1660 0447044150 61776 2334   50  2   3  572407 623   0  0  0  0  1
                        260   1660 0    0    0  570  250  207  5 108  10  1   0   0  0  0  0  2
                        260   1660 0    0    0    0    0    0  0   0   5 10  40  40  0  0 10  3
                        261   1660 0452044150 61776  765   22  1   2  25 913 161   0  0  0  0  1
                        261   1660 0    0    0   86   69    1  0  16   0  0   0   0  0  0  0  2
                        261   1660 0452044150    0    0    0  0   0   2  3  10   5  0  0  5  3
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PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS             VOL=STOR02   OPT: LN/PG=51               THOLD=10
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MEMBER NAME: CHEST     (CONT)                    ALIASES: NONE
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                    280        1660 0    0    0    17    13     0    1    2    0   0    0    0    0    0    0    2
                    280        1560 0412044100      0     0     0    0    5   10  10   10   35    0    0    0    3
                    281        1660 0417044100 61776   856    10    1    1   12 996  193    0    0    0    0    1
                    281        1660 0    0    0    78    61     2    4   10    0   0    0    0    0    0    0    2
                    281        1660 0    0    0     0     0     0    0    0    5  10   30   45    0    0    0    3
                    282        1660 0422044100 61776   938    19    1    1   211594  247    0    0    0    0    1
                    282        1660 0    0    0    87    20    48   19    0    0   0    0    0    0    0    0    2
                    282        1660 0    0    0     0     0     0    0    0    5  10   30   45    0    0    0    3
                    283        1660 0427044100 61776  1379    14    1    1   15 946  391    0    0    0    0    1
                    283        1660 0    0    0   501   438    21   26   16   40   0    0    0    0    0    0    2
                    283        1660 0    0    0     0     0     0    0    0    5  10   40   30    0    0   10    3
                    284        1660 0432044100 61776  1679    11    1    1   12 996  499    0    0    6   13    1
                    284        1660 0    0    0   425   245    97   52   30    0   0    0    0    0    0    0    2
                    284        1660 0    0    0     0     0     0    0    0    5   5   50   35    0    0    0    3
                    285        1660 0437044100 61776  6329    87    4    6   9738182108    0    0    0    0    1
                    285        1660 0    0    0  2774  1694   579  214  288   20   0    0    0    0    0    0    2
                    285        1660 0    0    0     0     0     0    0    0    5   5   35   35    0    0   10    3
                    286        1660 0442044100 61776  2326    39    2    3   441245  702    0    0    0    0    1
                    286        1660 0    0    0   289   148    48   87    6   30   0    0    0    0    0    0    2
                    286        1660 0    0    0     0     0     0    0    0    5  15   30   45    0    0   10    3
                    287        1660 0447044100 61776   861    31    1    2   35 747  233    0    0    0    0    1
                    287        1660 0    0    0    82    49    23    0    9   30   1    0    0    0    0    0    2
                    287        1660 0447044100      0     0     0    0    0    3   5   32   10    0    0   10    3
                    307        1660 0412044050 61776  2187    24    1    2   271112  711    0    0    0    0    1
                    307        1660 0    0    0   586   470    92    4   20    0   1    0    0    0    0    0    2
                    307        1660 0412044050      0     0     0    0    0   10  20   10   58    0    0    0    3
                    303        1660 0417044050 61776  1837    20    1    1   231162  550    0    0    0    0    1
                    308        1660 0    0    0   357   289    52    3   13   30   0    0    0    0    0    0    2
                    308        1660 0    0    0     0     0     0    0    0   10  20   30   40    0    0   10    3
                    309        1660 0422044050 61776  1054    20    1    2   221560  285    0    0    0    0    1
                    309        1660 0    0    0   152    44    97   11    0   30   0    0    0    0    0    0    2
                    309        1660 0    0    0     0     0     0    0    0    5  10   35   60    0    0   10    3
                    310        1660 0427044050 61776  3972    55    3    3   6126561221    0    0    6   13    1
                    310        1660 0    0    0  2104  1014   182  665  241   30   0    0    0    0    0    0    2
                    310        1660 0    0    0     0     0     0    0    0    5  10   35   40    0    0   10    3
                    311        1660 0432044050 61776  3163    53    3    4   602573  944    0    0   16   40    1
                    311        1660 0    0    0  1047   593   235  149   71   30   0    0    0    0    0    0    2
                    311        1660 0    0    0     0     0     0    0    0    3   5   55   35    0    0   10    3
                    312        1660 0437044050 61776  2761    20    1    1   221245  880    0    0    0    0    1
                    312        1660 0    0    0   942   413   296  138   95   10   0    0    0    0    0    0    2
                    312        1660 0    0    0     0     0     0    0    0    3   5   50   25    0    0    0    3
                    313        1660 0442044050 61776   917    10    1    1   12 415  239    0    0    0    0    1
                    313        1560 0    0    0   128    49    24   54    1    0   0    0    0    0    0    0    2
                    313        1660 0    0    0     0     0     0    0    0    3   5   15   70    0    0    0    3
                    314        1660 0447044050 61776   113     4    0    0    5  83   31    0    0    0    0    1
                    314        1660 0    0    0     5     5     0    0    0    0   0    0    0    0    0    0    2
                    314        1660 0447044050      0     0     0    0    0    1   3    1    1    0    0    0    3
                    335        1660 0407044000 61776   977     9    1    1   10 697  286    0    0    0    0    1
                    335        1660 0    0    0   140    67    65    2    6    0   0    0    0    0    0    0    2
                    335        1660 0407044000      0     0     0    0    0   15  25    5   30    0    0    0    3
```

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     OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)        PAGE     20
 PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS                    VOL=STOR02   OPT: LN/PG=51             THOLD=10
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 MEMBER NAME: CHEST     (CONT)                          ALIASES: NONE
                   336      1660 0412044000 61776 3282    32   2   2  3716771150    0    0    0    0    1
                   336      1660 0  0     0  1319 1045   225  12  37  40   0   0    0    0    0    0    2
                   336           0  0     0     0    0     0   0   0   5  10  40   40    0    0   10    3
                   337      1660 0417044000 61776 1307     9   1   1  11 813 426    0    0    0    0    1
                   337      1660 0  0     0   269  221    36   5   7   0   0   0    0    0    0    0    2
                   337           0  0     0     0    0     0   0   0   5  10  40   40    0    0    0    3
                   338      1660 0422044000 61776  756     5   1   1   51228 216    0    0    3    0    1
                   338      1660 0  0     0    25   24     1   0   0   0   0   0    0    0    0    0    2
                   338           0  0     0     0    0     0   0   0   5  10  30   50    0    0    0    3
                   339      1660 0427044000 61776  813     7   1   1   81079 251    0    0    0    0    1
                   339      1660 0  0     0    31   29     0   0   2   0   0   0    0    0    0    0    2
                   339           0  0     0     0    0     0   0   0  10  15  30   40    0    0    0    3
                   340      1660 0432044000 61776 1389     9   1   1   91079 413    0    0    0    0    1
                   340      1660 0  0     0   245   74    98  47  26   0   0   0    0    0    0    0    2
                   340           0  0     0     0    0     0   0   0  10  15  20   25    0    0    0    3
                   341      1660 0437044000 61776  219     1   0   0   1  83  65    0    0    0    0    1
                   341      1660 0  0     0    59   16    24  12   6   0   0   0    0    0    0    0    2
                   341           0437044000     0    0     0   0   0   0   0   5    5    0    0    0    3
                   364      1660 0407043950 61776  866     8   0   0   9 747 245    0    0    0    0    1
                   364      1660 0  0     0   152   42   101   2   7  30   0   0    0    0    0    0    2
                   364           0407043950     0    0     0   0   5  10  20   0   15    0    0    5    3
                   365      1660 0412043950 61776 1023     7   0   0   8 747 303    0    0    5    0    1
                   365      1660 0  0     0   123   59    56   3   5  10   0   0    0    0    0    0    2
                   365           0  0     0     0    0     0   0   0   5  10  15   20    0    0   10    3
                   366      1660 0417043950 61776  489     3   1   1   4 847 151    0    0    0    0    1
                   366      1660 0  0     0    19   14     0   0   5   0   0   0    0    0    0    0    2
                   366           0  0     0     0    0     0   0   5  10  20   5   20    0    0    0    3
                   367      1660 0422043950 61776  475     3   1   1   4 930 146    0    0    0    0    1
                   367      1660 0  0     0    14    9     0   0   5   0   0   0    0    0    0    0    2
                   367           0  0     0     0    0     0   0   0   3   5  10   40    0    0    0    3
                   368      1660 0427043950 61776  525     4   0   0   5 730 161    0    0    0    0    1
                   368      1660 0  0     0    17   16     0   0   1   0   0   0    0    0    0    0    2
                   368           0  0     0     0    0     0   0   0   2   3  40   15    0    0    0    3
                   369      1660 0432043950 61776  376     2   0   0   2 564 111    0    0    0    0    1
                   369      1660 0  0     0     5    5     0   0   0   0   0   0    0    0    0    0    2
                   369           0432043950     0    0     0   0   0   2   5  15   10    0    0    0    3
         ***** END OF MEMBER 'CHEST' *****                                             291 LINE(S) IN THIS MEMBER
```

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MEMBER NAME: DELA
                                  ALIASES: NONE
187      2360 0462044300 61776 5684   61   3   4  67 189 187    0    0    0    0    1
187      2360 0   0    0  3913 3317  233   7 357   0   0   0    0    0    0    0    2
187      2360 0462044300     0    0    0   0   0   1   2   0   10    0    0    0    3
188      2360 0467044300 6177616018  153   7   8 168 673 484    0    0    0    0    1
188      2360 0   0    0  7135 5255 1443  64 373  40   0   0    0    0    0    0    2
188      2360 0   0    0     0    0    0   0   0   2   3   0   15    0    0   10    3
189      2360 0472044300 61776    0    0   0   0   0   0   0    0    0    0    0    1
189      2360 0   0    0     0    0    0   0   0   0   0   0    0    0    0    0    2
189      2360 0   0    0     0    0    0   0   0   0   0   0    0    0    0    0    3
211      2360 0457044250 61776  116    2   0   0   3  12   3    0    0    0    0    1
211      2360 0   0    0    30   23    3   0   4   0   0   0    0    0    0    0    2
211      2360 0457044250     0    0    0   0   0   0   0   0    3    0    0    0    3
212      2360 0462044250 61776 7282  111   6   7 122 432 214    0    0    0    0    1
212      2360 0   0    0  1951 1422  127  21 381   0   0   0    0    0    0    0    2
212      2360 0   0    0     0    0    0   0   0  10  15   5   30    0    0    0    3
213      2360 0467044250 6177619918  181   9  11 1991020 553    0    0    0    0    1
213      2360 0   0    0  6204 4566 1003  16 618   0   0   0    0    0    0    0    2
213      2360 0   0    0     0    0    0   0   0   2   3   0   40    0    0    0    3
214      2360 0472044250 6177629731  169   8  11 1871711 905    0    0    0    0    1
214      2360 0   0    0  5279 4101  139  90 946  40   0   0    0    0    0    0    2
214      2360 0472044250     0    0    0   0   0   0   0   0    5    0    0    0    3
235      2360 0452044200 61776  392    2   0   0   2  24  11    0    0    0    0    1
235      2360 0   0    0    63   53    0   5   2   0   0   0    0    0    0    0    2
235      2360 0452044200     0    0    0   0   0   2   3   0   10    0    0    5    3
236      2360 0457044200 61776 1545   28   1   2  32 172  47    0    0    0    0    1
236      2360 0   0    0   529  400   49   3  75   0   0   0    0    0    0    0    2
236      2360 0   0    0     0    0    0   0   5  10  15  25   30    0    0    0    3
237      2360 0462044200 6177610075  112   6   8 125 536 291    0    0    0    0    1
237      2360 0   0    0  2134 1578   96  29 431   0   1   0    0    0    0    0    2
237      2360 0   0    0     0    0    0   0   0  20  30   5   40    0    0    0    3
238      2360 0467044200 6177624099  248  13  15 2761227 734    0    0    0    0    1
238      2360 0   0    0  5671 4114  728  21 810   0   0   0    0    0    0    0    2
238      2360 0   0    0     0    0    0   0   0   3   5   0   35    0    0    0    3
239      2360 0472044200 6177639421  485  26  30 53551093007    0    0    0    0    1
239      2360 0   0    0 1958316199 1097  502149   0   0   0    0    0    0    0    2
239      2360 0   0    0     0    0    0   0   0   0   0   0    5    0    0    0    3
240      2360 0477044200 6177635823  183   9  11 19918881341    0    0    0    0    1
240      2360 0   0    0 12302 9978 1097   51221  20   0   0    0    0    0    0    2
240      2360 0477044200     0    0    0   0   0   0   0   0    3    0    0    0    3
260      2360 0447044150 61776  167    6   0   0   7  17   5    0    0    0    0    1
260      2360 0   0    0    44   24   12   1   7   0   0   0    0    0    0    0    2
260      2360 0447044150     0    0    0   0   0   0   0   0   10    0    0    0    3
261      2360 0452044150 61776 3846   36   2   2  39 236 107    0    0    0    0    1
261      2360 0   0    0   645  515   30  36  42  50   0   0    0    0    0    0    2
261      2360 0   0    0     0    0    0   0   0  10  15  40   35    0    0    0    3
262      2360 0457044150 61776 5558   98   5   6 109 479 140    0    0    0    0    1
262      2360 0   0    0  3728 2743  819  16 141  70   0   0    0    0    0    0    2
262      2360 0   0    0     0    0    0   0   0  20  30  10   30    0    0   10    3
263      2360 0462044150 6177617619  210  11  13 2331225 553    0    0    0    0    1
263      2360 0   0    0  8771 6887 1215  70 587  80   0   0    0    0    0    0    2
263      2360 0   0    0     0    0    0   0   0   5  15   0   35    0    0   10    3
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      OSI DATA MANAGEMENT UTILITY "PDSLIST"         VER 3-4     TIME:  16.49.30         DATE: 01/27/83 (83027)       PAGE     22
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS               VOL=STOR02   OPT: LN/PG=51              THOLD=10
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 MEMBER NAME: DELA     (CONT)                        ALIASES: NONE
                           264      2360 0467044150 6177642730  355  18  22 39324431328   0   0   0    0   1
                           264      2360 0   0    0 12735 9593 2026  501059  40   0   0   0   0   0    0   2
                           264      2360 0   0    0     0    0    0   0   0   5  10   0  15   0   0   10   3
                           265      2360 0472044150 6177688102  393  21  25 43347912750   0   1   1    1   1
                           265      2360 0   0    0 1944311011 6488  571854 140   0   0   0   0   0    0   2
                           265      2360 0   0    0     0    0    0   0   0   0   0   0  10   0   0   10   3
                           266      2360 0477044150 6177630616  115   8   8 1291782 980   0   1   1    1   1
                           266      2360 0   0    0  6568 4196 2027   2 342  40   0   0   0   0   0    0   2
                           266      2360 0   0    0     0    0    0   0   0   0   0   0   5   0   0    0   3
                           287      2360 0447044100 61776 1194   46   3   3  52 118  38   0   0   0    0   1
                           287      2360 0   0    0   316  173   88   7  48  15   0   0   0   0   0    0   2
                           287      2360 0447044100     0    0    0   0  15  15  15   0  15   0   0    5   3
                           288      2360 0452044100 61776 3868  139   8   9 156 349 113   0   0   0    0   1
                           288      2360 0   0    0   973  653  227  22  69  30   0   0   0   0   0    0   2
                           288      2360 0   0    0     0    0    0   0   5   5  10  30  50   0   0   10   3
                           289      2360 0457044100 61776 7772  112   6   7 126 543 227   0   0   0    0   1
                           289      2360 0   0    0  1226  628  515  14  67   0   0   0   0   0   0    0   2
                           289      2360 0   0    0     0    0    0   0   5   5  10  30  45   0   0    0   3
                           290      2360 0462044100 6177631658  169  10  11 1891676 909   0   0   0    0   1
                           290      2360 0   0    0  3520 2435  741  56 286   0   0   0   0   0   0    0   2
                           290      2360 0   0    0     0    0    0   0   0   5  10   0  25   0   0    0   3
                           291      2360 0467044100 6177659110  431  28  31 47946731930   9   0   0    0   1
                           291      2360 0   0    0 274901661810011  36 820  80   1   0   0   0   0    0   2
                           291      2360 0   0    0     0    0    0   0   0   0   0   0  10   0   0    0   3
                           292      2360 0472044100 6177624034  326  19  22 3641794 745  18   1   1    1   1
                           292      2360 0   0    0 17199 432612563   8 301   0   1   0   0   0   0    0   2
                           292      2360 0   0    0     0    0    0   0   0   0   0   0  10  25   0    0   3
                           293      2360 0477044100 61776 1783   38   3   3  42 307  55  18   0   0    0   1
                           293      2360 0   0    0  4436  572 3850   0  15   0   1   0   0   0   0    0   2
                           293      2360 0477044100     0    0    0   0   0   0   0   0  15   5   0    0   3
                           315      2360 0452044050 61776  230    7   0   0   8  24   7   0   0   0    0   1
                           315      2360 0   0    0    46   32    9   1   3   0   0   0   0   0   0    0   2
                           315      2360 0452044050     0    0    0   0   0   5   5   0   0   0   0    0   3
                           316      2360 0457044050 61776 3821   49   3   3  55 189 114   0   0   0    0   1
                           316      2360 0   0    0   470  356   78   4  31   0   0   0   0   0   0    0   2
                           316      2360 0   0    0     0    0    0   0   0   5  10   0  25   0   0    0   3
                           317      2360 0462044050 6177622098  298  21  23 3322254 719  15   0   0    0   1
                           317      2360 0   0    0  9732 4957 4411   3 356  60   1   0   0   0   0    0   2
                           317      2360 0   0    0     0    0    0   0   0   0   0   0  20   0   0    0   3
                           318      2360 0467044050 61776 6997   53   7   7  601392 228  16   0   0    0   1
                           318      2360 0   0    0  3557 1111 2307   0 138   0   1   0   0   0   0    0   2
                           318      2360 0467044050     0    0    0   0   0   0   0   0   5   0   0    0   3
                           314      2360 0447044050     0   72    3   0   0   3   7   2   0   0   0    0   1
                           314                         19   10    5   0   3   0   0   0   0   0   0    0   2
          ***** END OF MEMBER 'DELA' *****                                            95 LINE(S) IN THIS MEMBER
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)        PAGE      23
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS                 VOL=STOR02   OPT: LN/PG=51                THOLD=10
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MEMBER NAME: GLOUC                                                                                                    -----------
                                              ALIASES: NONE
          291       1760 0467044100 61776  117    2    0    0    3  299   34    4    0    0    0    1
          291       1760 0    0    0    80   15   64    0    1    0    1    0    0    0    0    0    2
          291       1760 0    0    0     0    0    0    0    0    0    0    0    0    0    0    0    3
          292       1760 0472044100 61776  583   11    1    2  131496  168   17    0    0    0    1
          292       1760 0    0    0   400   73  322    0    4    0    1    0    0    0    0    0    2
          292       1760 0472044100     0    0    0    0    0    0    5    0   10    0    0    5    3
          293       1760 0477044100 61776 4705   55    4    4  6123941421   17   41  342  603    1
          293       1760 0    0    0  1288  748  496    3   41    0    1    0    0    0    0    0    2
          293       1760 0    0    0     0    0    0    0    0   10   15    5   10    0    0   25    3
          294       1760 0482044100 61776 9209  115    7    8 13027282648   15    0    0    0    1
          294       1760 0    0    0  1507  928  506    8   66    0    1    0    0    0    0    0    2
          294       1760 0    0    0     0    0    0    0    0   10   10    0    5    0    0   20    3
          295       1760 0487044100 6177615021  285   15   19 31927284668    5    0    0    0    1
          295       1760 0    0    0  5629 3835 1283   50  460   25    1    0    0    0    0    0    2
          295       1760 0    0    0     0    0    0    0    0    0    0    0    0    0    0    0    3
          296       1760 0492044100 61776  501    6    0    0    7   35  135    0    0    0    0    1
          296       1760 0    0    0   131   92   28    1   10    0    0    0    0    0    0    0    2
          296       1760 0    0    0     0    0    0    0    0    0    0    0    0    0    0    0    3
          317       1760 0462044050 61776  114   11    1    1   13   88   38    9    0    0    0    1
          317       1760 0    0    0    47   33   10    1    2    0    1    0    0    0    0    0    2
          317       1760 0462044050     0    0    0    0    0    0    0    0    0    0    0    0    3
          318       1760 0467044050 61776  857   71    4    5   80  581  281   15    0  120   22    1
          318       1760 0    0    0   402  221  154    8   15   10    1    0    0    0    0    0    2
          318       1760 0    0    0     0    0    0    0    0   10   10    5   10   10    0   20    3
          319       1760 0472044050 61776 4537  103    6    8 11714961318    0    1  204  322    1
          319       1760 0    0    0  2986  604 2339    3   38   40    1    0    0    0    0    0    2
          319       1760 0    0    0     0    0    0    0    0    5    5   10   25    5    0   10    3
          320       1760 0477044050 61776 8105  115    6    8 12917952446    0    1   84  300    1
          320       1760 0    0    0  2231 1231  923    7   70   30    1    0    0    0    0    0    2
          320       1760 0    0    0     0    0    0    0    0   10   10   20   20    5    0   20    3
          321       1760 0482044050 6177612546  149    8   10 16818483735    0    1   84  300    1
          321       1760 0    0    0  4008 2848  859   13  287   20    1    0    0    0    0    0    2
          321       1760 0    0    0     0    0    0    0    0    5    5   35   10    0    0   10    3
          322       1760 0487044050 6177618490  287   15   19 32328695365    0    0    0    0    1
          322       1760 0    0    0  6678 5246  819   20  593   30    1    0    0    0    0    0    2
          322       1760 0    0    0     0    0    0    0    0   10   10   15   15    0    0   20    3
          323       1760 0492044050 61776 2507   31    2    2   35  176  674    0    0    0    0    1
          323       1760 0    0    0   653  459  138    5   52    0    0    0    0    0    0    0    2
          323       1760 0    0    0     0    0    0    0    0    5    5    0   10    0    0   10    3
          346       1760 0462044000 61776  227   23    1    2   26  176   77    3    0    0    0    1
          346       1760 0    0    0    94   66   19    3    4   10    0    0    0    0    0    0    2
          346       1760 0462044000     0    0    0    0    0    0    0    0   10   10    0    0    3
          347       1760 0467044000 61776  813   75    5    6   84  616  274    0  120   22    0    1
          347       1760 0    0    0   355  254   71    9   17   20    1    0    0    0    0    0    2
          347       1760 0    0    0     0    0    0    0    0    5    5   30   10   10    0   10    3
          348       1760 0472044000 61776 1250   70    4    5   79  792  402    0  120   22    0    1
          348       1760 0    0    0   499  379   87    7   24    0    1    0    0    0    0    0    2
          348       1760 0    0    0     0    0    0    0    0    5   10   50   30    0    0   15    3
          349       1760 0477044000 61776 3435   92    5    6 10312851021    0    0    0    0    1
          349       1760 0    0    0   427  305   79    9   35    0    1    0    0    0    0    0    2
          349       1760 0    0    0     0    0    0    0    0    0    0   50   45    0    0    0    3
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.30          DATE: 01/27/83 (83027)          PAGE     24
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS                 VOL=STOR02    OPT: LN/PG=51                THOLD=10
  ---------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: GLOUC     (CONT)                            ALIASES: NONE

                     350      1760 0482044000 61776 6188    40   2   3  4410911737   0    0    0    0    1
                     350      1760 0    0    0   961  515   363   8  75   0   1   0   0    0    0    0    2
                     350      1760 0    0    0     0    0     0   0   5  10   5  35  30    0    0   20    3
                     351      1760 0487044000 6177611339   126   6   9 14122003177   0    0    6    0    1
                     351      1760 0    0    0  2135 1372   564  26 173  35   0   0   0    0    0    0    2
                     351      1760 0    0    0     0    0     0   0  10   5  15  35  20    0    0   30    3
                     352      1760 0492044000 61776 6376    55   3   4  61 4401754    0    0    0    0    1
                     352      1760 0    0    0   870  567   221  26  56   0   0   0   0    0    0    0    2
                     352      1760 0    0    0     0    0     0   0   5  10   5  25  20    0    0   20    3
                     376      1760 0467043950 61776  773    44   3   3  50 528 252   0    0    0    0    1
                     376      1760 0    0    0   413  312    77   5  19   0   0   0   0    0    0    0    2
                     376      1760 0467043950     0    0     0   0   5   5   0  30  20    0    0   10    3
                     377      1760 0472043950 61776 3183    75   4   5  8524461079   0    0    0    0    1
                     377      1760 0    0    0  1293  741   501   8  42   0   0   0   0    0    0    0    2
                     377      1760 0    0    0     0    0     0   0  10   5   0  50  25    0    0   15    3
                     378      1760 0477043950 61776 1285    22   1   1  25 845 385   0    0    0    0    1
                     378      1760 0    0    0   242  176     7  10  50   0   0   0   0    0    0    0    2
                     378      1760 0    0    0     0    0     0   0  10   5  10  35  25    0    0   25    3
                     379      1760 0482043950 61776 2638    22   1   1  25 792 757   0    0    0    0    1
                     379      1760 0    0    0   435  257   112   9  57   0   0   0   0    0    0    0    2
                     379      1760 0    0    0     0    0     0   0   5  10  35  40  10    0    0   50    3
                     380      1760 0487043950 6177618319   132   7   8 14526935636   0    0    0    0    1
                     380      1760 0    0    0  5620 2837  2569  30 185  30   1   0   0    0    0    0    2
                     380      1760 0    0    0     0    0     0   0   5   5  10  20   5    0    0   20    3
                     381      1760 0492043950 6177611525    88   4   6  99 7923190   0    0   66    2    1
                     381      1760 0    0    0  1223 [illegible]   342  54  67   0   1   0   0    0    0    0    2
                     381      1760 0    0    0     0    0     0   0   5   5  20  45  20    0    0   30    3
                     382      1760 0497043950 61776 3169    24   1   2  27 264 893   0    0   66    2    1
                     382      1760 0    0    0   307  188    88  12  19   0   0   0   0    0    0    0    2
                     382      1760 0    0    0     0    0     0   0   5  10   0  20   5    0    0   15    3
                     400      1760 0467043900 61776  264    13   1   1  15 176  85   0    0    0    0    1
                     400      1760 0    0    0   146  111    27   1   7   0   0   0   0    0    0    0    2
                     400      1760 0467043900     0    0     0   0   0   0   0   5   0    0    0    0    3
                     401      1760 0472043900 61776  646    20   1   2  23 704 191   0    0    0    0    1
                     401      1760 0    0    0   165  129    27   1   8   0   0   0   0    0    0    0    2
                     401      1760 0    0    0     0    0     0   0   0   0   0  25   5    0    0    0    3
                     402      1760 0477043900 61776 1035    16   1   1  181109 298    0    0    0    0    1
                     402      1760 0    0    0    59   50     3   1   5   0   0   0   0    0    0    0    2
                     402      1760 0    0    0     0    0     0   0  15   5  10  25  10    0    0   30    3
                     403      1760 0482043900 61776 2217    20   1   1  22 880 659   0    0    0    0    1
                     403      1760 0    0    0   373  254    87   4  28   0   1   0   0    0    0    0    2
                     403      1760 0    0    0     0    0     0   0  15   5  10  35  30    0    0   30    3
                     404      1760 0487043900 61776 8256    47   2   3  5113902361   0    0    0    0    1
                     404      1760 0    0    0  2186 1462   634   1  89  60   0   0   0    0    0    0    2
                     404      1760 0    0    0     0    0     0   0  10   5  15  30  25    0    0   30    3
                     405      1760 0492043900 61776 9990    60   3   4  6614962876   0    0   66    2    1
                     405      1760 0    0    0  2116 1430   584   6  96   0   1   0   0    0    0    0    2
                     405      1760 0    0    0     0    0     0   0  45  15  15   5  10    5    0   75    3
                     406      1760 0497043900 61776 6631    72   4   5  8112672119   0    0   66    2    1
                     406      1760 0    0    0  1363  704   475   2 183   0   0   0   0    0    0    0    2
                     406      1760 0    0    0     0    0     0   0  20   5  10  20  25    0    0   35    3
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   OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)        PAGE      25
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS               VOL=STOR02   OPT: LN/PG=51               THOLD=10
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MEMBER NAME: GLOUC    (CONT)                            ALIASES: NONE
                          407       1760 0502043900 61776 4697    50    2   3   56 8801486    0    0    0    0    1
                          407       1760 0    0    0   923   477   321    2 123    0    0    0    0    0    0    0    2
                          407       1760 0    0    0     0     0     0    0  30    0    5   20   10    5    0   35    3
                          408       1760 0507043900 61776     0     0    0   0    0    0    0    0    0    0    0    1
                          408       1760 0    0    0     0     0     0    0   0    0    0    0    0    0    0    0    2
                          408       1760 0    0    0     0     0     0    0   0    0    0    0    0    5    0    0    3
                          425       1760 0482043850 61776  310     3    0   0    3  176   96    0    0    0    0    1
                          425       1760 0    0    0    10     7     3    0   0    0    0    0    0    0    0    0    2
                          425       1760 0482043850     0     0     0    0   5    5    5   10    0    0    0   15    3
                          426       1760 0487043850 61776 2529    14    1   1   15  845  761    0    0    0    0    1
                          426       1760 0    0    0   280   195    63    2  21   30    0    0    0    0    0    0    2
                          426       1760 0    0    0     0     0     0    0  10    5   15   25   25    0    0   30    3
                          427       1760 0492043850 61776 3497    16    1   1   18 8451040    0    0    0    0    1
                          427       1760 0    0    0   516   367   108    2  39   20    0    0    0    0    0    0    2
                          427       1760 0    0    0     0     0     0    0  25    5   15   20   25    0    0   45    3
                          428       1760 0497043850 61776 2166    10    1   1   11  334  650    0    0    0    0    1
                          428       1760 0    0    0   201   117    59    2  22    0    0    0    0    0    0    0    2
                          428       1760 0    0    0     0     0     0    0  35    5   10   20   20    0    0   50    3
                          429       1760 0502043850 61776 3037    22    1   2   24  440  922    0    0    0    0    1
                          429       1760 0    0    0   179    98    60    1  21    0    1    0    0    0    0    0    2
                          429       1760 0    0    0     0     0     0    0  40    5   10   20   25    0    0   55    3
                          430       1760 0507043850 61776  972     7    0   0    8  141  295    0    0    0    0    1
                          430       1760 0    0    0    57    31    19    0   7    0    0    0    0    0    0    0    2
                          430       1760 0    0    0     0     0     0    0  40    5    5   10   35    0    0   50    3
                          448       1760 0487043800 61776  528     1    0   0    1   88  156    0    0    0    0    1
                          448       1760 0    0    0    72    44    20    1   8    0    0    0    0    0    0    0    2
                          448       1760 0487043800     0     0     0    0  25    0    0    0    0   10    0   25    3
                          449       1760 0492043800 61776 1373     2    0   0    2  229  406    0    0    0    0    1
                          449       1760 0    0    0   187   113    51    2  20   20    0    0    0    0    0    0    2
                          449       1760 0    0    0     0     0     0    0  15    0    5    0    5    0    0   20    3
                          450       1760 0497043800 61776 1902     3    0   0    3  317 [illegible] 0    0    0    0    1
                          450       1760 0    0    0   260   157    71    3  28    0    0    0    0    0    0    0    2
                          450       1760 0    0    0     0     0     0    0  45    5   10   20   15    0    0   60    3
                          451       1760 0502043800 61776 2271    10    1   1   11  352  681    0    0    0    0    1
                          451       1760 0    0    0   216   126    63    2  24    0    0    0    0    0    0    0    2
                          451       1760 0    0    0     0     0     0    0  55    0   10   10   20    5    0   65    3
                          452       1760 0507043800 61776 1215     9    0   1   10  176  369    0    0    0    0    1
                          452       1760 0    0    0    71    39    24    0   8   30    1    0    0    0    0    0    2
                          452       1760 0    0    0     0     0     0    0  25    5    5    0    5   10    0   35    3
                          468       1760 0492043750 61776  528     1    0   0    1   88  156    0    0    0    0    1
                          468       1760 0    0    0    72    44    20    1   8   10    0    0    0    0    0    0    2
                          468       1760 0492043750     0     0     0    0   5    0    0   10    0    0    0    5    3
                          469       1760 0497043750 61776 2724     2    1   1    31936  840    0    0    0    0    1
                          469       1760 0    0    0   730   343   275   43  69   30    0    0    0    0    0    0    2
                          469       1760 0    0    0     0     0     0    0  25    0    5   30   20    0    0   30    3
                          470       1760 0502043750 61776  951     1    0   0    2  158  281    0    0    8    0    1
                          470       1760 0    0    0   130    78    35    2  14   10    0    0    0    0    0    0    2
                          470       1760 0    0    0     0     0     0    0  30    0    5   20   10    0    0   35    3
         ***** END OF MEMBER 'GLOUC' *****                                                150 LINE(S) IN THIS MEMBER
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)          PAGE      26
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS               VOL=STOR02   OPT: LN/PG=51              THOLD=10
  ----------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: MERC                                 ALIASES: NONE
                              31        2980 0517044700 61776 3686    38   1   2  42 387 122    0    0    0    0    1
                              31        2980 0   0    0   645  215   364   1  17  25   0   0    0    0    0    0    2
                              31        2980 0517044700     0    0     0   0   0   8   5  20   50    0    0    0    3
                              44        2980 0512044650 61776 1629    17   1   1  19  75  51    0    0    0    0    1
                              44        2980 0   0    0   250  161    54   1  34   0   0   0    0    0    0    0    2
                              44        2980 0512044650     0    0     0   0   0  18   0  30   55    0    0    0    3
                              45        2980 0517044650 61776 1853    12   0   1  13 119  56    0    0    0    0    1
                              45        2980 0   0    0   715  196   435   1  27  30   0   0    0    0    0    0    2
                              45        2980 0   0    0     0    0     0   0   5   5   3  40   55    0    0    0    3
                              46        2980 0522044650 61776 4370    24   1   1  27 167 132    0    0    0    0    1
                              46        2980 0   0    0  1470  865   510  10  61   0   0   0    0    0    0    0    2
                              46        2980 0   0    0     0    0     0   0  15   5   3  50   20    0    0    0    3
                              47        2980 0527044650 6177622964   155   7   91711013 676    0    0    0    0    1
                              47        2980 0   0    0 1428513045   810  20 410   0   1   0    0    0    0    0    2
                              47        2980 0   0    0     0    0     0   0  20  10   5  20   15    0    0    0    3
                              60        2980 0502044600 61776  130     1   0   0   2   6   4    0    0    0    0    1
                              60        2980 0   0    0    20   13     4   0   3   0   1   0    0    0    0    0    2
                              60        2980 0   0    0     0    0     0   0   0   0   0   0    0    0    0    0    3
                              61        2980 0507044600 61776 1173    12   1   1  14  54  36    0    0    0    0    1
                              61        2980 0   0    0   180  116    39   1  25   0   1   0    0    0    0    0    2
                              61        2980 0507044600     0    0     0   0   0  20   5   5   15    0    0    0    3
                              62        2980 0512044600 61776 2281    24   1   1  27 104  71    0    0   15   20    1
                              62        2980 0   0    0   350  225    75   1  48   0   0   0    0    0    0    0    2
                              62        2980 0   0    0     0    0     0   0   0   5   0  55   35    0    0    0    3
                              63        2980 0517044600 61776 4464    55   3   3  62 390 144    0    0   15   20    1
                              63        2980 0   0    0  1729  910   639  54  75  30   0   0    0    0    0    0    2
                              63        2980 0   0    0     0    0     0   0   5   5   3  40   20    0    0    0    3
                              64        2980 0522044600 61776 5413    64   3   4  71 170 135    0    0    0    0    1
                              64        2980 0   0    0  3185 2370   710  16  88   0   1   0    0    0    0    0    2
                              64        2980 0   0    0     0    0     0   0   5   0   2  55   30    0    0    0    3
                              65        2980 0527044600 61776 5035   111   5   7 123 367 175    0    0    0    0    1
                              65        2980 0   0    0  6468 4840  1463  16 149  20   1   0    0    0    0    0    2
                              65        2980 0   0    0     0    0     0   0   5  10  10  30   35    0    0    0    3
                              66        2980 0532044600 61776 1645    17   1   1  19  89  50    0    0    0    0    1
                              66        2980 0   0    0   495  339   146   1   8  25   0   0    0    0    0    0    2
                              66        2980 0   0    0     0    0     0   0   5   0   0  30   20    0    0    0    3
                              81        2980 0512044550 61776 6730   113   5   7 125 238 220    0    0   30   40    1
                              81        2980 0   0    0 12346 8924  3295   8 119  25   1   0    0    0    0    0    2
                              81        2980 0512044550     0    0     0   0   0   5   0  10   40    0    0    0    3
                              82        2980 0517044550 6177625376   207  11  122301189 813    0    0   15   20    1
                              82        2980 0   0    0  9330 7195  1722  23 373  10   0   0    0    0    0    0    2
                              82        2980 0   0    0     0    0     0   0   0   5   5   5   15    0    0    0    3
                              83        2980 0522044550 6177613969   149   8  10 164 596 412    0    0    0    0    1
                              83        2980 0   0    0  7909 5228  2287  35 359  20   1   0    0    0    0    0    2
                              83        2980 0   0    0     0    0     0   0   5   5   0   5   15    0    0    0    3
                              84        2980 0527044550 61776 5950    68   3   4  75 247 174    0    0    0    0    1
                              84        2980 0   0    0  2989 1857   853  22 255  22   0   0    0    0    0    0    2
                              84        2980 0   0    0     0    0     0   0   2  15   3  35   35    0    0    0    3
                              85        2980 0532044550 61776 3374    39   2   3  44 140 106    0    0    0    0    1
                              85        2980 0   0    0   581  321   242   1  16   0   0   0    0    0    0    0    2
                              85        2980 0   0    0     0    0     0   0   3  15   2  60   20    0    0    0    3
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MEMBER NAME: MERC      (CONT)                            ALIASES: NONE

                    86      2980 0537044550 6177625528   294  15  19 327 685 917   0   0   0   0   1
                    86      2980 0    0   0  8242 4733  3422  16  68  35   1   0   0   0   0   0   2
                    86      2980 0    0   0     0    0     0   0   5   5   0  15  15   0   0   0   3
                    87      2980 0542044550 61776 2420    71   4   5  80 104  91   0   0   0   0   1
                    87      2980 0    0   0   591  338   219  13  20  10   1   0   0   0   0   0   2
                    87      2980 0    0   0     0    0     0   0  10   0   0  10  15   0   0   0   3
                   103      2980 0512044500 61776 4156    42   2   3  47 358 106   0   0   0   0   1
                   103      2980 0    0   0  1978 1408   539   2  28   0   1   0   0   0   0   0   2
                   103      2980 0    0   0     0    0     0   0   0   0   0   0   0   0   0   0   3
                   104      2980 0517044500 6177672334   393  22  25 42852302477  10   0   0   0   1
                   104      2980 0    0   0 537353943612991  251282  15   1   0   0   0   0   0   2
                   104      2980 0517044500     0    0     0   0   0   0   0   0   2   0   0   0   3
                   105      2980 0522044500 6177646102   289  14  18 32125631609   0   0   0   0   1
                   105      2980 0    0   0 21928 788213107  33 906  20   0   0   0   0   0   0   2
                   105      2980 0    0   0     0    0     0   0   0   0   0   0   5   0   0   0   3
                   106      2980 0527044500 6177618848   209  10  14 2321007 550   0   0   0   0   1
                   106      2980 0    0   0  4232 3258   750  11 203  15   0   0   0   0   0   0   2
                   106      2980 0    0   0     0    0     0   0   0  15   0   5  15   0   0   0   3
                   107      2980 0532044500 61776 2064   123   7   9 139 134  70   0   0  20   1   1
                   107      2980 0    0   0   567  342   145   2  77  40   0   0   0   0   0   0   2
                   107      2980 0    0   0     0    0     0   0   5  15   5  45  20   0   0   0   3
                   108      2980 0537044500 61776 3337   126   7   9 142 164 122   0   0   0   0   1
                   108      2980 0    0   0   843  490   283  14  54   0   0   0   0   0   0   0   2
                   108      2980 0    0   0     0    0     0   0   5   5   2  25  10   0   0   0   3
                   127      2980 0517044450 61776 5269    27   2   2  30 521 189  11   0   0   0   1
                   127      2980 0    0   0  1406  637   746   0  23   0   1   0   0   0   0   0   2
                   127      2980 0517044450     0    0     0   0   5  10   0   0   0  35   0   0   3
                   128      2980 0522044450 6177620684   138   7   8 154 879 710  13   0   0   0   1
                   128      2980 0    0   0  3725 3126   392  23 184   0   1   0   0   0   0   0   2
                   123      2980 0    0   0     0    0     0   0   5   5   0  20  15   0   0   0   3
                   129      2980 0527044450 6177613142   262  15  18 295 656 385   0   0   0   0   1
                   129      2980 0    0   0  1804  886   817   5  95   0   0   0   0   0   0   0   2
                   129      2980 0    0   0     0    0     0   0   2   2   0  30  10   0   0   0   3
                   130      2980 0532044450 61776 2066    97   6   7 110 119  66   0   0   5   0   1
                   130      2980 0    0   0   334  183   109   1  41   0   0   0   0   0   0   0   2
                   130      2980 0    0   0     0    0     0   0   0   0   0   0   0   5   0   0   3
                   151      2980 0522044400 61776  803     1   0   0   1  30  28   3   0   0   0   1
                   151      2980 0    0   0   169  149    17   0   2   0   0   0   0   0   0   0   2
                   151      2980 0    0   0     0    0     0   0   0   0   0   0   0 100   0   0   3
                   152      2980 0527044400 61776  574    21   1   2  24  30  18   0   0   0   0   1
                   152      2980 0    0   0    41   15    22   0   3   0   0   0   0   0   0   0   2
                   152           0    0   0     0    0     0   0   0   5   5  45  45   0   0  10   3
                   153      2980 0532044400 61776 1149    43   3   3  49  60  35   0   0   0   0   1
                   153      2980 0    0   0    82   31    44   0   7   0   0   0   0   0   0   0   2
                   153      2980 0532044400     0    0     0   0   0   0   0  25   5   0   0   0   3
                    43      2980 0502044650     0  130     1   0   0   2   6   4   0   0   0   0   1
                    43                         20   13     4   0   3   0   0   0   0   0   0   0   2

     ***** END OF MEMBER 'MERC' *****                                            98 LINE(S) IN THIS MEMBER
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  OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)         PAGE     28
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS              VOL=STOR02   OPT: LN/PG=51              THOLD=10
  ---------------------------------------------------------------------------------------------------------------------
MEMBER NAME: MONT                                 ALIASES: NONE
                       21       6000 0452044700 61776 1933    10   1   1  11 420  62   0   0   0   0   1
                       21       6000 0   0    0   552  140   381   2  29  10   1   0   0   0   0   0   2
                       21       6000 0452044700     0    0     0   0   1  15  20   5  55   0   5   0   3
                       22       6000 0457044700 61776 6160    63   2   3  681428 205   0   0   2   0   1
                       22       6000 0   0    0  3114 1388  1621   5 102  30   1   0   0   0   0   0   2
                       22       6000 0   0    0     0    0     0   0   1   2   7   4  40   0   4   0   3
                       23       6000 0462044700 61776  273     1   0   0   1  60   8   0   0   0   0   1
                       23       6000 0   0    0    28   17     2   3   5   0   1   0   0   0   0   0   2
                       23       6000 0462044700     0    0     0   0   0   0   0   0  20   0   0   0   3
                       32       6000 0447044650 61776  735     1   1   1   1 300  22   0   0   0   0   1
                       32       6000 0   0    0    63   13    45   2   4   0   0   0   0   0   0   0   2
                       32       6000 0447044650     0    0     0   0   0   5  10  35  45  10  35   0   3
                       33       6000 0452044650 61776 1761    10   1   1  11 390  53   0   0   0   0   1
                       33       6000 0   0    0   335  175   126   2  33   0   0   0   0   0   0   0   2
                       33       6000 0   0    0     0    0     0   0  10  30  40   5  10   0   5   0   3
                       34       6000 0457044650 61776 3101    24   2   2  26 900  99   0   0   0   0   1
                       34       6000 0   0    0  1118  484   567  20  44  30   0   0   0   0   0   0   2
                       34       6000 0   0    0     0    0     0   0   1   5  10  35  35   0  35   0   3
                       35       6000 0462044650 61776 1366    29   2   2  33 390  41   0   0   0   0   1
                       35       6000 0   0    0   138   92    11  12  19   0   0   0   0   0   0   0   2
                       35       6000 0   0    0     0    0     0   0   8  20  32   0  20   0   0   0   3
                       36       6000 0467044650 61776  274    18   1   1  20 120   8   0   0   0   0   1
                       36       6000 0   0    0    27   23     4   0   1   0   0   0   0   0   0   0   2
                       36       6000 0467044650     0    0     0   0   0   1   2   3  25   0   3   0   3
                       48       6000 0442044600 61776  969    10   0   1  11 180  33   0   0   0   0   1
                       48       6000 0   0    0   170  103    45   1  20   0   0   0   0   0   0   0   2
                       48       6000 0442044600     0    0     0   0   0   0   0  25  70   0  25   0   3
                       49       6000 0447044600 61776 3979    45   2   3  51 660 136   0   0   5   3   1
                       49       6000 0   0    0   883  580   222   0  79   0   0   0   0   0   0   0   2
                       49       6000 0   0    0     0    0     0   0   0   2   3  65  25   0  65   0   3
                       50       6000 0452044600 61776 1482    10   1   1  11 330  45   0   0   0   0   1
                       50       6000 0   0    0   246  206    11   0  29   0   0   0   0   0   0   0   2
                       50       6000 0   0    0     0    0     0   0   2   5  10  60  20   0  60   0   3
                       51       6000 0457044600 61776 2405    34   2   2  371080  74   0   0   0   0   1
                       51       6000 0   0    0   371  161   166   9  34  35   1   0   0   0   0   0   2
                       51       6000 0   0    0     0    0     0   0  10  15  20  20  30   0  20   0   3
                       52       6000 0462044600 61776 1304    63   4   5  71 600  54   0   0   0   0   1
                       52       6000 0   0    0   389  222   124   4  39   0   0   0   0   0   0   0   2
                       52       6000 0   0    0     0    0     0   0   5  10  20  40  25   0  40   0   3
                       53       6000 0467044600 61776 5084    57   4   5  651038 153   0   0   0   0   1
                       53       6000 0   0    0  1184  678   346   3 157   0   0   0   0   0   0   0   2
                       53       6000 0   0    0     0    0     0   0   0   5   5  40  45   0  40   0   3
                       54       6000 0472044600 61776 9197    33   3   3  371698 310   0   0   0   0   1
                       54       6000 0   0    0  2806 1893   698   1 215  30   0   0   0   0   0   0   2
                       54       6000 0472044600     0    0     0   0   0   0   0   5  20   0   5  16   3
                       67       6000 0442044550 6177622681    99   7   8 1094423 795   0   1  34  93   1
                       67       6000 0   0    0 11572 6333  4578  15 640   0   0   0   0   0   0   0   2
                       67       6000 0442044550     0    0     0   0   0   0   5  40  30   0  40   0   3
                       68       6000 0447044550 6177610481    52   4   4  581710 327   0   0   0   0   1
                       68       6000 0   0    0  2955 1135  1595  27 194   0   0   0   0   0   0   0   2
                       68       6000 0   0    0     0    0     0   0   5  10  20  20  30   0  20   0   3
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4    TIME:  16.49.30        DATE: 01/27/83 (83027)        PAGE    29
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS               VOL=STOR02   OPT: LN/PG=51              THOLD=10

  ---------------------------------------------------------------------------------------------------------------------------

MEMBER NAME: MONT     (CONT)                        ALIASES: NONE

                           69      6000 0452044550 61776 2149   23    1   2   25 570   66    0    1   14   75     1
                           69      6000 0   0    0   490  266  171    2  49    0   0    0    0    0    0    0     2
                           69      6000 0   0    0     0    0    0    0   5   20  30   25   20    0   25    0     3
                           70      6000 0457044550 61776 4228   59    2   2   641422  131    0    0    0    0     1
                           70      6000 0   0    0   831  530  216    8  75   35   1    0    0    0    0    0     2
                           70      6000 0   0    0     0    0    0    0   5    5  20   20   40    0   20    0     3
                           71      6000 0462044550 61776 3956   28    2   2   31 738  117    0    0    0    0     1
                           71      6000 0   0    0  1051  767  207    6  70    0   0    0    0    0    0    0     2
                           71      6000 0   0    0     0    0    0    0   0    2   3   75   20    0   75    0     3
                           72      6000 0467044550 61776 5127   64    4   4   71 834  151    0    0    0    0     1
                           72      6000 0   0    0  1319  879  323    6 112    0   0    0    0    0    0    0     2
                           72      6000 0   0    0     0    0    0    0   0    2   3   75   20    0   75    0     3
                           73      6000 0472044550 6177617252  107    6   6  1182772  573    0    0    0    0     1
                           73      6000 0   0    0  7994 2115 5271   42 567   40   0    0    0    0    0    0     2
                           73      6000 0   0    0     0    0    0    0   0    0   0   60   30    0   60   10     3
                           74      6000 0477044550 61776 6066   79    4   4   88 690  201    0    0    0    0     1
                           74      6000 0   0    0  3216 1515 1412    5 271   25   0    0    0    0    0    0     2
                           74      6000 0   0    0     0    0    0    0   0    2   3   30   23    0   30   10     3
                           75      6000 0482044550 61776    0    0    0   0    0   0    0    0    0    0    0     1
                           75      6000 0   0    0     0    0    0    0   0    0   0    0    0    0    0    0     2
                           75      6000 0482044550     0    0    0    0   0    0   0   99    0    0   99    0     3
                           88      6000 0437044500 61776  143    0    0   0    0  60    5    0    0    0    0     1
                           88      6000 0   0    0    23   16    7    0   0    0   0    0    0    0    0    0     2
                           88      6000 0   0    0     0    0    0    0   0    0   0    0    0    0    0    0     3
                           89      6000 0442044500 61776 3110   42    2   3   451002  110    0    0    0    0     1
                           89      6000 0   0    0  7430 3458 3901    0  71    0   0    0    0    0    0    0     2
                           89      6000 0442044500     0    0    0    0   0    0   0    0    5    0    0    0     3
                           90      6000 0447044500 61776 4908   54    3   3   60 840  164    0    0    0    0     1
                           90      6000 0   0    0  5723 1828 3620   25 246    0   0    0    0    0    0    0     2
                           90      6000 0   0    0     0    0    0    0   0    1   3   20    8    0   20    0     3
                           91      6000 0452044500 61776 2588   38    2   3   42 438   80    0    1   20  112     1
                           91      6000 0   0    0  1022  435  363    7 216    0   0    0    0    0    0    0     2
                           91      6000 0   0    0     0    0    0    0   0    1   3   80   15    0   80    0     3
                           92      6000 0457044500 61776 4836   48    3   3   531062  141    0    0    0    0     1
                           92      6000 0   0    0   922  442  399    8  70   30   1    0    0    0    0    0     2
                           92      6000 0   0    0     0    0    0    0   0    1   3   85   10    0   85    0     3
                           93      6000 0462044500 61776 4640   37    2   2   421020  100    0    0    8   28     1
                           93      6000 0   0    0   804  654   79    2  69    0   0    0    0    0    0    0     2
                           93      6000 0   0    0     0    0    0    0   0    1   3   85   10    0   85    0     3
                           94      6000 0467044500 61776 4176   35    2   2   40 540  128    0    0    0    0     1
                           94      6000 0   0    0   663  331  272    2  59    0   0    0    0    0    0    0     2
                           94      6000 0   0    0     0    0    0    0   0    1   3   85   10    0   85    0     3
                           95      6000 0472044500 6177624084  258   14  17  2864050  816    0    0    0    0     1
                           95      6000 0   0    0 13903 3935 9516   21 430   60   0    0    0    0    0    0     2
                           95      6000 0   0    0     0    0    0    0   0    1   3   60   20    0   60   10     3
                           96      6000 0477044500 6177612885  214   11  13  2392268  417    0    0   14   47     1
                           96      6000 0   0    0  7849 3092 4435   19 291    0   0    0    0    0    0    0     2
                           96      6000 0   0    0     0    0    0    0   0    1   3   50   30    0   50    0     3
                           97      6000 0482044500 61776 2858   42    3   3   47 690   89    0    0   21   70     1
                           97      6000 0   0    0  1343  647  652    7  30    0   0    0    0    0    0    0     2
                           97      6000 0   0    0     0    0    0    0   0    1   2   64   10    0   64    0     3
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4      TIME:  16.49.30         DATE: 01/27/83 (83027)          PAGE     30
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS                 VOL=STOR02   OPT: LN/PG=51                THOLD=10
   ---------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: MONT      (CONT)
                                                      ALIASES: NONE
                 98        6000 0487044500 61776  967   20   1   1  22 432  23    0    0    0    0    1
                 98        6000 0   0    0   554  453   93   2   7   0   0   0    0    0    0    0    2
                 98        6000 0487044500     0    0    0   0   0   0   0  10    8    0   10    0    3
                113        6000 0447044450 61776  118    2   0   0   2  18   4    0    0    0    0    1
                113        6000 0   0    0    51   21   18   0  11   0   1   0    0    0    0    0    2
                113        6000 0447044450     0    0    0   0   0   0   0   0   99    0    0    0    3
                114        6000 0452044450 61776 6852   47   3   3  511452 232    0    0    0    0    1
                114        6000 0   0    0  2800  973 1730  14  84   0   0   0    0    0    0    0    2
                114        6000 0   0    0     0    0    0   0   0   1   3  20   25    0   20    0    3
                115        6000 0457044450 61776 7245   80   4   5  891260 208    0    0    0    0    1
                115        6000 0   0    0  2455 1165 1156  20 114  35   1   0    0    0    0    0    2
                115        6000 0   0    0     0    0    0   0   0   0   0  50   45    0   50    0    3
                116        6000 0462044450 61776 5809   56   3   3  63 960 180    0    0    7   28    1
                116        6000 0   0    0  1703  722  841  22 117   0   0   0    0    0    0    0    2
                116        6000 0   0    0     0    0    0   0   1   5  10  35   45    0   35    0    3
                117        6000 0467044450 61776 3904   54   3   4  61 570 111    0    0    0    0    1
                117        6000 0   0    0   821  454  253   7  88   0   0   0    0    0    0    0    2
                117        6000 0   0    0     0    0    0   0   0   1   3  80   15    0   80    0    3
                118        6000 0472044450 61776 5777  124   6   8 1391260 159    0    0    0    0    1
                118        6000 0   0    0  2842 1464 1207  23 149  40   0   0    0    0    0    0    2
                118        6000 0   0    0     0    0    0   0   0   2   5  70   15    0   70   10    3
                119        6000 0477044450 61776 9655  193  11  13 2182232 308    0    0    0    0    1
                119        6000 0   0    0  4423 2376 1530  95 424  30   0   0    0    0    0    0    2
                119        6000 0   0    0     0    0    0   0   0   2  10  50   25    0   50   10    3
                120        6000 0482044450 61776 7839   89   5   6 1001110 209    0    0    0    0    1
                120        6000 0   0    0  3648 1319 2038  51 240   0   0   0    0    0    0    0    2
                120        6000 0   0    0     0    0    0   0   0   2   3  40   50    0   40    0    3
                121        6000 0487044450 6177623327  262  13  15 2883468 741    0    0    0    0    1
                121        6000 0   0    0 10800 5645 4402  73 682  40   0   0    0    0    0    0    2
                121        6000 0   0    0     0    0    0   0   0   0   0  20   30    0   20    5    3
                122        6000 0492044450 61776 7197  175   8  10 1941350 212    0    0    0    0    1
                122        6000 0   0    0  1881  410 1275  43 153  30   0   0    0    0    0    0    2
                122        6000 0492044450     0    0    0   0   0   2   3   0   20    0    0    5    3
                137        6000 0452044400 61776  489    4   0   0   5  60  14    0    0    0    0    1
                137        6000 0   0    0   230   43  180   2   4   0   1   0    0    0    0    0    2
                137        6000 0452044400     0    0    0   0   0   0   0   0    5    0    0    0    3
                138        6000 0457044400 61776 5053   53   3   3  59 618 156    0    0    0    0    1
                138        6000 0   0    0  2914  389 2471   9  45  20   1   0    0    0    0    0    2
                138        6000 0   0    0     0    0    0   0   0   1   3  28   35    0   28    0    3
                139        6000 0462044400 6177613665  166   8  10 1852082 412    0    0    0    0    1
                139        6000 0   0    0  4696 2174 2142  49 332  30   1   0    0    0    0    0    2
                139        6000 0   0    0     0    0    0   0   2   5  10  20   50    0   20    0    3
                140        6000 0467044400 6177641488  257  15  16 28256701321    0    0    0    0    1
                140        6000 0   0    0 1738613382 3124  15 845  80   1   0    0    0    0    0    2
                140        6000 0   0    0     0    0    0   0   0   1   3  10   45    0   10    0    3
                141        6000 0472044400 6177625147  283  14  17 3143798 758    0    4   51  112    1
                141        6000 0   0    0 10870 7567 1780  551454   0   0   0    0    0    0    0    2
                141        6000 0   0    0     0    0    0   0   0   1   3   0   30    0    0    0    3
                142        6000 0477044400 6177610663  180  10  12 2021950 329    0    6   76  167    1
                142        6000 0   0    0  6714 4149 1765  42 751  10   0   0    0    0    0    0    2
                142        6000 0   0    0     0    0    0   0   2   5  10  40   40    0   40    5    3
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MEMBER NAME: MONT      (CONT)                     ALIASES: NONE
                143       6000 0482044400 6177614799  233   13  15 2612568 436   0    0    0    0    1
                143       6000 0    0    0 11198 3955 6288  19 938  60    0    0    0    0    0    0    2
                143       6000 0    0    0     0    0    0   0    0   0    0   10   45    0   10   10    3
                144       6000 0487044400 6177641780  478   26  31 53164741263   0    0    0    0    1
                144       6000 0    0    0 10476 8185  640 1501500  40    0    0    0    0    0    0    2
                144       6000 0    0    0     0    0    0   0    0   2    5    0   15    0    0   10    3
                145       6000 0492044400 6177613766  174    9  11 1952958 409   0    0    0    0    1
                145       6000 0    0    0  5384 2449 2228  27 666  55    0    0    0    0    0    0    2
                145       6000 0    0    0     0    0    0   0    2   5   15    0   35    0    0    0    3
                146       6000 0497044400 61776 3075   27    1   2  30  450   90    0    0    0    0    1
                146       6000 0    0    0   628  296  258   0  73   0    0    0    0    0    0    0    2
                146       6000 0497044400     0    0    0   0    0   0    0    0    3    0    0    0    3
                162       6000 0457044350 61776  881   34    2   2  37  210   26    0    0    0    0    1
                162       6000 0    0    0  1808 1014  784   6    4   0    1    0    0    0    0    0    2
                162       6000 0457044350     0    0    0   0    0  30   60    0    5    0    0    0    3
                163       6000 0462044350 61776 3548  116    6   7 129  810   95    0    0    0    0    1
                163       6000 0    0    0  7391 4048 2994   5 344  50    1    0    0    0    0    0    2
                163       6000 0462044350     0    0    0   0    0   2    2    0   25    0    0    0    3
                164       6000 0467044350 6177628298  476   25  30 5324788 925   0    0    0    0    1
                164       6000 0    0    0 2076810766 8262  421632 140    1    0    0    0    0    0    2
                164       6000 0    0    0     0    0    0   0    0  10   15    0   20    0    0   10    3
                165       6000 0472044350 6177623902  502   26  33 5614740 764   0    0    0    0    1
                165       6000 0    0    0 19370 731010133  261851 220    1    0    0    0    0    0    2
                165       6000 0    0    0     0    0    0   0    0   5   10    0   40    0    0   10    3
                166       6000 0477044350 6177610692  217   12  14 2431890 313   0    0    0    0    1
                166       6000 0    0    0  3731 2318  941  40 431  50    0    0    0    0    0    0    2
                166       6000 0    0    0     0    0    0   0    0   4   10    0   40    0    0   10    3
                167       6000 0482044350 6177623171  240   12  14 2643420 731   0    0    0    0    1
                167       6000 0    0    0  9861 5342 1409  763026   0    0    0    0    0    0    0    2
                167       6000 0    0    0     0    0    0   0    0   0    0    0   10    0    0    0    3
                168       6000 0487044350 6177642557  424   19  23 46665701537   0    0    0    0    1
                168       6000 0    0    0 2404619306 1414 4712356  50    0    0    0    0    0    0    2
                168       6000 0    0    0     0    0    0   0    0   0    0    0   10    0    0    0    3
                169       6000 0492044350 61776 9913   79    3   4  861650 335   0    0    0    0    1
                169       6000 0    0    0  3908 2348 1042  30 488  25    0    0    0    0    0    0    2
                169       6000 0    0    0     0    0    0   0    0   3    8    0   10    0    0    0    3
                188       6000 0467044300 61776 2758   70    4   4  78  672   84    0    0    0    0    1
                188       6000 0    0    0   669  529   77   3  60   0    0    0    0    0    0    0    2
                188       6000 0467044300     0    0    0   0    0  10   15    0   30    0    0    0    3
                189       6000 0472044300 6177614187  278   16  19 3122460 489   0    0    0    0    1
                189       6000 0    0    0  6962 5583  785  35 557   0    1    0    0    0    0    0    2
                189       6000 0    0    0     0    0    0   0    0  10   15    0   25    0    0    0    3
                190       6000 0477044300 61776 7814  115    6   7 127  870  247    0    0    0    0    1
                190       6000 0    0    0  2289 1398  645  26 219  10    1    0    0    0    0    0    2
                190       6000 0477044300     0    0    0   0    0   3    5    0    0    0    0    0    3
                192       6000 0487044300 61776 9355   40    2   2  441410 304   0    0    0    0    1
                192       6000 0    0    0  3684 3147  160   1 378   0    0    0    0    0    0    0    2
                192       6000 0487044300     0    0    0   0    0   2    1    0    2    0    0    0    3
                193       6000 0492044300 61776 1273    7    0   0   8  150   44    0    0    0    0    1
                193       6000 0    0    0   738  554   62   0 123   0    0    0    0    0    0    0    2
                193       6000 0492044300     0    0    0   0    0   0    0    0    1    0    0    0    3
```

```
     OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)        PAGE      32
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS                VOL=STOR02   OPT: LN/PG=51               THOLD=10
    ------------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: MONT      (CONT)                              ALIASES: NONE
                             214       6000 0472044250 6177616728  190    8   10 2102880 637    0    0    0    0    1
                             214       6000 0    0    0 1331511250  547 1401865   30    0    0    0    0    0    0    2
                             214       6000 0472044250          0    0    0    0    1    1    0    2    0    0    0    3
                             215       6000 0477044250 6177625157  203   10   11 2243450 864    0    0    0    0    1
                             215       6000 0    0    0 2181217938 1225 1482496    0    0    0    0    0    0    0    2
                             215       6000 0477044250          0    0    0    0    1    1    0   10    0    0    0    3
                             216       6000 0482044250 61776   103    1    0    0    1   30    4    0    0    0    0    1
                             216       6000 0    0    0     536   465   40    0   32  130    0    0    0    0    0    0    2
                             216       6000 0    0    0       0     0    0    0    0    0    0    0    0    0    0    0    3
                             187       6000 0462044300        0   112    3    0    0    4   30    3    0    0    0    0    1
                             187                             8     7    0    0    1    0    0    0    0    0    0    0    2
       ***** END OF MEMBER 'MONT' *****
                                                                                     215 LINE(S) IN THIS MEMBER
```

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MEMBER NAME: NEWCASTL                          ALIASES: NONE

              312       0180 0437044050 61776  206  206  21  59  59   6   0   0   0   0   0    1
              312       0180 0    0    0   44   46   66  76  76   0   0  10  10  10  81  23    2
              312       0180 0437044050     0    0    1   0   0   0   0   0  15   0   0   0    3
              313       0180 0442044050 61776 1118 1125 117 199 200  21   0   0   0   0   0    1
              313       0180 0    0    0   67   69  129 151 151   0   0  66  66  70 160  45    2
              313       0180 0    0    0    0    0  600   0   0   5  10   0  45   0   0  15    3
              314       0180 0447044050 61776 2595 2612 273   8   9   2   0   0   0   0   0    1
              314       0180 0    0    0 3221 2796 2007 209 209   0   0  15  15  19 215  60    2
              314       0180 0    0    0    0    0 3925   0   5  15  15   0  35   0   0  35    3
              315       0180 0452044050 61776 6319 6181 702 555 611 424   0   0   0   0   0    1
              315       0180 0    0    0 5716 5506 514523512351   0   0 104 106 1452429 667    2
              315       0180 0    0    0    0    014850   0   0   5   5   0  30   0   0  10    3
              316       0180 0457044050 61776 4932 5023 56712661288 150   0   0   0   0   0    1
              316       0180 0    0    0 2228 2248 254126362640  35   1 101 102 1172724 802    2
              316       0180 0    0    0    0    020925   0   0   0   0   0   5   0   0   0    3
              317       0180 0462044050 61776 1058 1074 118 773 780  83   0   5   0   0   0    1
              317       0180 0    0    0   37   37   37  40  40   0   0  25  26  31  42  11    2
              317       0180 0462044050     0    0  817   0   0   0   0   0   5   0   0   0    3
              340       0180 0432044000 61776   20   20   2   0   0   0   0   0   0   0   0    1
              340       0180 0    0    0   10   10   10  47  48   0   0   1   1   1  66  10    2
              340       0180 0432044000     0    0    1   0   0   2   2   0   5   0   0   4    3
              341       0180 0437044000 61776  705  718  81  74  78  14   0   0   0   0   0    1
              341       0180 0    0    0  176  181  255 524 538   0   0  30  30  31 720 124    2
              341       0180 0    0    0    0    0 3000   0   0   5   5   0  65   0   0  10    3
              342       0180 0442044000 61776 2276 2321 26515711572 159   0   0   0   0   0    1
              342       0180 0    0    0  208  178  178 597 603   0   1  20  21  40 696 160    2
              342       0180 0    0    0    0    0 1670   0   0  15  15   0  20   0   0  30    3
              343       0180 0447044000 617761698017278193491009147 972   0   0   0   0   0    1
              343       0180 0    0    0 2082 2069 256521062115   0   1 225 232 3412267 748    2
              343       0180 0    0    0    0    010200   0   3  10  10   0  20   0   0  23    3
              344       0180 0452044000 617761714217284182630553094 354   0   0   0   0   0    1
              344       0180 0    0    0 6068 6102 658350975125  70   0 244 246 28654091774    2
              344       0180 0    0    0    0    047220   0   0   3   3   0  15   0   0   6    3
              345       0180 0457044000 61776 2169 2212 252 362 371  46   0  25   0   0   0    1
              345       0180 0    0    0  456  474  72713341334  40   1 123 123 1321349 417    2
              345       0180 0    0    0    0    0 8961   0   0   0   0   0   5   0   0   0    3
              346       0180 0462044000 61776    0    0   0   0   0   0   0   4   0   0   0    1
              346       0180 0    0    0    0    0    0   0   0   0   0   0   0   0   0   0    2
              346       0180 0    0    0    0    0    1   0   0   0   0   0   0   0   0   0    3
              369       0180 0432043950 61776 2144 2195 25517971799 182   0   0   0   0   0    1
              369       0180 0    0    0  123  133  202 219 218   0   0  24  26  49 256  63    2
              369       0180 0432043950     0    0 1950   0   0  20  20   0  20   0   0  40    3
              370       0180 0437043950 61776 2215 2276 271 229 252  36   0   0   0   0   0    1
              370       0180 0    0    0 1351 1370 161813321347   0   0  17  17  221549 364    2
              370       0180 0    0    0    0    0 4920   0   0  10  10   0  35   0   0  20    3
              371       0180 0442043950 61776 8373 8505 94112591275 144   0   0   5  11  12    1
              371       0180 0    0    0 4954 5001 563629412943  40   0 778 578 2033000 898    2
              371       0180 0    0    0    0    022160   0   0   0   0   0  10   0   0   0    3
              372       0180 0447043950 617761826218416194964136463 701   0   0  10  58  24    1
              372       0180 0    0    0 2535 2574 317554385439  10   119591495 61654841768    2
              372       0180 0    0    0    0    042280   0   0   3   3   0  10   0   0   6    3
```

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PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS                  VOL=STOR02   OPT: LN/PG=51                THOLD=10
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MEMBER NAME: NEWCASTL (CONT)                          ALIASES: NONE

          373       0180 0452043950 617766202463538740947034747 511   0  16   5  11  12    1
          373       0180 0   0    0 33352338724019124792485  40   11019101910482628 897    2
          373       0130 0   0    0     0    015472   0   0   0   0   0  10  25   0   0    3
          374       0180 0457043950 61776   88   89   9  59  59   6   0  12   0   0   0    1
          374       0180 0   0    0     8    8   11   0   0   0   0   2   2   2   0   0    2
          374       0180 0   0    0     0    0    1   0   0   0   0   0   0   0   0   0    3
          393       0180 0432043900 617761418414338154365216542 679   0   0   0   0   0    1
          393       0130 0   0    0  2413 2428 263222142242  50   0 138 143 2282739 610    2
          393       0180 0432043900     0    016600   0   0   5   5   0  10   0   0  10    3
          394       0180 0437043900 617761051910848131535773704 491   0   0   0   0   0    1
          394       0180 0   0    0  4182 4238 483330563070  50   0 210 214 2663258 926    2
          394       0180 0   0    0     0    025660   0   0   5   5   0  20   0   0   0    3
          395       0180 0442043900 617761053310908138015391681 335   0   0  10  53  24    1
          395       0130 0   0    0  4348 4373 469813161319  20   1 476 479 5271370 414    2
          395       0180 0   0    0     0    034834   0   0   5   5  15  20   0   0  10    3
          396       0180 0447043900 617761763717782188212531285 168   0   0  41 230  96    1
          396       0180 0   0    0  2135 2152 283720532057  30   11369136913722112 608    2
          396       0130 0   0    0     0    087132   0   0   3   3   0  35   5   0   6    3
          397       0180 0452043900 61776 5298 5329 565 926 971 148   0  25   5  11  12    1
          397       0180 0   0    0   256  264  363 702 703  25   1 428 428 431 711 202    2
          397       0180 0   0    0     0    032140   0   0   0   0   0  15  10   0   0    3
          398       0180 0457043900 61776    0    0   0   0   0   0   0   0   0   0   0    1
          398       0180 0   0    0     0    0    0   0   0   0   0   0   0   0   0   0    2
          398       0180 0   0    0     0    0    1   0   0   0   0   0   0   0   0   0    3
          415       0180 0432043850 61776 3628 3697 41718241846 212   0   0   0   0   0    1
          415       0180 0   0    0   647  672  980 672 677   0   0 120 121 140 745 204    2
          415       0180 0432043850     0    014050   0   0  20  20   0  30   0   0  40    3
          416       0180 0437043850 61776 6041 6125 66912711322 194   0   0   0   0   0    1
          416       0180 0   0    0  1680 1696 1888 742 754   0   0 322 322 332 913 191    2
          416       0180 0   0    0     0    013977   0   0  20  20   0  40   0   0  40    3
          417       0120 0442043850 61776 6999 7002 702 204 221  43   0   0  10  58  24    1
          417       0130 0   0    0  2999 3013 319710011013  40   0 396 396 3971188 272    2
          417       0180 0   0    0     0    018160   0   0   5   5  25  50   2   0  10    3
          418       0180 0447043850 61776 3797 3844 41610231041 126   0  20  10  58  24    1
          418       0180 0   0    0   569  597  944 236 236  25   1 235 235 235 248  71    2
          418       0180 0   0    0     0    0 7340   0   5   0   0   0   5  20   0   5    3
          419       0180 0452043850 61776    0    0   0   0   0   0   0  12   5  11  12    1
          419       0180 0   0    0     0    0    0   0   0   0   0   0   0   0   0   0    2
          419       0130 0   0    0     0    0    1   0   0   0   0   0   0   0   0   0    3
          437       0180 0432043800 61776 1400 1406 144 355 357  38   0   0   0   0   0    1
          437       0180 0   0    0   447  465  697 202 203   0   0  73  73  75 215  61    2
          437       0180 0432043800     0    012080   0   0  20  20  15  35   0   0  40    3
          438       0180 0437043800 61776 2580 2594 268 321 331  47   0   0   0   0   0    1
          438       0130 0   0    0   476  478  504 211 216   0   0 183 183 186 280  49    2
          438       0180 0   0    0     0    0 9950   0   0  20  20  10  46   0   0  40    3
          439       0180 0442043800 61776 4603 4614 46823152320 239   0   0   0   0   0    1
          439       0130 0   0    0   112  113  137  97  98  30   1 221 221 233 119  27    2
          439       0130 0   0    0     0    013020   0   0   3   3  10  65   5   0   6    3
          440       0130 0447043800 61776  508  509  52 262 262  26   0  33   0   0   0    1
          440       0180 0   0    0    49   50   53  86  86   0   1   8   8   9  86  26    2
          440       0180 0   0    0     0    0  720   0   0   0   0   0  15  10   0   0    3
```

```
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS                    VOL=STOR02   OPT: LN/PG=51            THOLD=10
 ---------------------------------------------------------------------------------------------------------------
MEMBER NAME: NEWCASTL (CONT)                     ALIASES: NONE
               441      0180 0452043800 61776     0     0    0    0    0    0    0    3    0    0    0    1
               441      0180 0    0    0     0     0     0    0    0    0    0    0    0    0    0    0    2
               441      0130 0    0    0     0     0     1    0    0    0    0    0    0    0    0    0    3
               456      0180 0432043750 61776   442   442   44   18   19    4    0   33    0    0    0    1
               456      0180 0    0    0    26    27    47   49   49    0    1   41   41   41   53   15    2
               456      0180 0432043750     0     0  1300    0    0    5    5   30   35    0    0   10    3
               457      0180 0437043750 61776   660   661   66   34   36    7    0   33    0    0    0    1
               457      0180 0    0    0    91    94   151  119  119   30    1   58   58   58  125   35    2
               457      0180 0    0    0     0     0  4390    0    0    3    3   30   30    0    0    6    3
               458      0180 0442043750 61776   206   210   23   43   44    5    0   30    0    0    0    1
               458      0180 0    0    0    55    55    63   48   48    0    1    7    7    8   50   14    2
               458      0180 0    0    0     0     0  8360    0    0    0    0   20   70    0    0    0    3
               459      0180 0447043750 61776   323   339   42   18   18    2    0    0    0    0    0    1
               459      0180 0    0    0   111   116   185  159  159    0    1    2    2    2  160   49    2
               459      0180 0    0    0     0     0   324    0    5    0    0   35    5   10    0    5    3
               460      0130 0452043750 61776     0     0    0    0    0    0    0   19    0    0    0    1
               460      0180 0    0    0     0     0     0    0    0    0    0    0    0    0    0    0    2
               460      0180 0432043700     0     0     1    0    0    0    0    0    0    0    0    0    3
               471      0180 0432043700 61776   711   713   73   51   56   11    0    0    0    0    0    1
               471      0180 0    0    0    37    37    45   27   27    0    0   64   64   65   28    8    2
               471      0180 0    0    0     0     0     1    0    0    3    3   60   35    0    0    6    3
               472      0180 0437043700 61776   706   708   72   43   47   10    0    0    0    0    0    1
               472      0180 0    0    0    43    44    58   32   32   30    0   64   64   64   34   10    2
               472      0180 0    0    0     0     0     1    0    0    3    3   60   35    0    0    6    3
               473      0180 0442043700 61776    47    56   12   11   12    2    0    0    0   64   15    1
               473      0180 0    0    0    34    36    67   30   30    0    0    0    0    1   34    9    2
               473      0130 0    0    0     0     0     1    0    0    0    0   60   10   10    0    0    3
               474      0180 0447043700 61776    25    32    8    0    0    0    0   11    0    0    0    1
               474      0180 0    0    0    32    35    75   25   25    0    1    0    0    0   27    8    2
               474      0180 0    0    0     0     0     1    0    5    0    0   20   10   25    0    5    3
               475      0180 0452043700 61776     0     0    0    0    0    0    0    9    0    0    0    1
               475      0180 0    0    0     0     0     0    0    0    0    0    0    0    0    0    0    2
               475      0180 0    0    0     0     0     1    0    0    0    0    0    0    0    0    0    3
               481      0180 0432043650 61776   194   225   45  126  135   25    0    0    0    0    0    1
               481      0180 0    0    0    26    27    44   12   12    0    0    6    6   12   12    4    2
               481      0180 0432043650     0     0  7670    0    0    3    3   50   40    0    0    6    3
               482      0180 0437043650 61776  1474  1527  190  328  330   35    0    0    0    0    0    1
               482      0180 0    0    0   579   604   923  404  408   30    1   39   39   44  494  112    2
               482      0180 0    0    0     0     0     1    0    2    2    2   50   40    0    0    6    3
               483      0180 0442043650 61776   226   240   34    3    3    1    0    0    0    0    0    1
               483      0180 0    0    0   157   161   216   76   77    0    1    5    5    8  107   13    2
               483      0180 0    0    0     0     015820    0    0    0    0   40   35   20    0    0    3
               484      0180 0447043650 61776    44    47    7    0    0    0    0   23    0    0    0    1
               484      0180 0    0    0    45    46    60   13   13    0    1    0    0    0   13    4    2
               484      0180 0    0    0     0     0     1    0    5    0    0    0   10   45    0    5    3
               485      0180 0452043650 61776     0     0    0    0    0    0    0    6    0    0    0    1
               485      0180 0    0    0     0     0     0    0    0    0    1    0    0    0    0    0    2
               485      0180 0    0    0     0     0     1    0    0    0    0    0    0    0    0    0    3
               488      0180 0432043600 61776    57    63   11   24   26    5    0    0    0    0    0    1
               488      0130 0    0    0    12    13    19   19   19    0    0    2    2    3   11    6    2
               488      0180 0432043600     0     0     1    0    0    5    5   55   10    0    0   13    3
```

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MEMBER NAME: NEWCASTL (CONT)                     ALIASES: NONE

            489      0180 0437043600 61776   922   923   93    9    9    1    0    0    0    0    0    1
            489      0180 0    0       0   272   272  277  105  105   30    1   60   60   60  111   32    2
            489      0180 0    0       0     0     0    1    0    0    5    5   50   10    0    0   10    3
            490      0180 0442043600 61776   786   786   78    2    2    0    0    0    0    0    0    0    1
            490      0180 0    0       0   298   298  298   82   82    0    0   45   45   45   91   24    2
            490      0180 0    0       0     0     0    1    0    5    5    5   35   45    0    0   15    3
            491      0180 0447043600 61776   127   127   12    0    0    0    0    0    0    0    0    0    1
            491      0180 0    0       0    51    52   66   16   16    0    0    8    8    8   19    4    2
            491      0180 0    0       0     0     0    1    0    5    0    0    0   10   80    0    5    3
            492      0180 0452043600 61776    43    43    4    0    0    0    0   18    0    0    0    1
            492      0180 0    0       0     5     5   12    5    5    0    1    4    4    4    5    1    2
            492      0180 0    0       0     0     0    1    0    0    0    0    0    0   30    0    0    3
            493      0180 0457043600 61776     0     0    0    0    0    0    0    3    0    0    0    1
            493      0180 0    0       0     0     0    0    0    0    0    1    0    0    0    0    0    2
            493      0180 0    0       0     0     0    1    0    0    0    0    0    0    0    0    0    3
            494      0180 0432043550 61776    21    22    2    1    1    0    0    0    0    0    0    1
            494      0180 0    0       0     7     7   11   17   17   25    0    1    1    1   18    5    2
            494      0180 0432043550       0     0 2120    0    0   15   15    0   30    0    0   30    3
            495      0180 0437043550 61776   168   168   17    2    2    0    0    0    0    0    0    1
            495      0180 0    0       0    54    54   64   47   47   25    0   10   10   10   51   14    2
            495      0180 0    0       0     0     0    1    0   10   20   20   10   38    0    0   50    3
            496      0180 0442043550 61776   518   518   52    0    0    0    0    0    0    0    0    1
            496      0180 0    0       0   179   182  219   71   71   10    0   29   29   29   74   22    2
            496      0180 0    0       0     0   018190    0   10   20   20   10   38    0    0   50    3
            497      0180 0447043550 61776   138   138   14    0    0    0    0    0    0    0    0    1
            497      0180 0    0       0    25    27   43   18   18    0    0   12   12   12   18    5    2
            497      0180 0    0       0     0     0    1    0    5   15   15   25   23   20    0   35    3
            498      0180 0452043550 61776    43    43    4    0    0    0    0    0    0    0    0    1
            498      0180 0    0       0     5     5   12    5    5    0    0    4    4    4    5    1    2
            498      0180 0    0       0     0     0   64    0    5    0    0   15   40   25    0    5    3
            499      0180 0432043500 61776    85    86    9    1    1    0    0    0    0    0    0    1
            499      0180 0    0       0    31    32   43   27   27    0    0    4    4    4   29    8    2
            499      0180 0432043500       0     0    1    0    5   20   20   10   10    0    0   45    3
            500      0180 0437043500 61776   270   271   27    0    0    0    0    0    0    0    0    1
            500      0180 0    0       0   101   104  136   52   52    0    0   13   13   13   55   16    2
            500      0180 0    0       0     0     0    1    0    5   15   15   30   30    0    0   35    3
            501      0180 0442043500 61776   384   384   38    0    0    0    0    0    0    0    0    1
            501      0180 0    0       0   144   148  193   62   62   35    0   19   19   19   64   19    2
            501      0180 0442043500       0     0    1    0    0   10   10   45   20    0    0   20    3
            502      0180 0447043500 61776   206   206   21    0    0    0    0    0    0    0    0    1
            502      0180 0    0       0    74    76  100   33   33    0    0   11   11   11   34   10    2
            502      0180 0    0       0     0     0    1    0    5    5    5   40   10   20    0   15    3
      ***** END OF MEMBER 'NEWCASTL' *****                                      195 LINE(S) IN THIS MEMBER
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.30         DATE: 01/27/83 (S3027)
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS               VOL=STOR02   OPT: LN/PG=51                  THOLD=10
   ---------------------------------------------------------------------------------------------------------

MEMBER NAME: PHIL                                  ALIASES: NONE
                      145       7160 0492044400 61776   46     1   0   0   1   4  17   0   0   1   2   1
                      145       7160 0   0    0    82    2    59   0   0   0   0   0   0   0   0   0   2
                      145       7160 0492044400     0    0     0   0   0   0   0   0   2   0   0   0   3
                      146       7160 0497044400 61776 1738    73   4   5  82 195 509   0   0   2   3   1
                      146       7160 0   0    0  4374  228  1824   9  19  35   0   0   0   0   0   0   2
                      146            0   0    0     0    0     0   0   0   0   0   0  10   0   0   0   3
                      147       7160 0502044400 61776   33     5   0   0   5   7   0   0   0   1   2   1
                      147       7160 0   0    0   446   31   131   0   0   0   0   0   0   0   0   0   2
                      147            0   0    0     0    0     0   0   0   0   0   0   2   0   0   0   3
                      166       7160 0477044350 61776  280    70   4   5  77 288  72   0   0   0   0   1
                      166       7160 0   0    0   993   93     8   3   2   0   0   0   0   0   0   0   2
                      166            0477044350     0    0     0   0   0   5  10   0  10   0   0   0   3
                      167       7160 0482044350 61776 2986   151   9  11 169 5891106   0   0   0   0   1
                      167       7160 0   0    0  6280  568   126  38  34   0   0   0   0   0   0   0   2
                      167            0   0    0     0    0     0   0   0   0   0   0   0   0   0   0   3
                      168       7160 0487044350 61776  233    12   0   1  13  18 101   0   0   0   0   1
                      168       7160 0   0    0   415   38     5   0   2   0   0   0   0   0   0   0   2
                      168       7160 0   0    0     0    0     0   0   0   0   0   0   0   0   0   0   3
                      169       7160 0492044350 61776 3734   190   9  12 211 4441239   0   0   2   3   1
                      169       7160 0   0    0  5920  376   723  16 135  25   0   0   0   0   0   0   2
                      169            0492044350     0    0     0   0   0   5  10   0  10   0   0   0   3
                      170       7160 0497044350 61776 5030   306  15  18 339 6111507   0   5  20  33   1
                      170       7160 0   0    0 26948 1550  9551  69 175  20   0   0   0   0   0   0   2
                      170            0   0    0     0    0     0   0   0   1   3   0  30   0   0   0   3
                      171       7160 0502044350 61776 3111    55   3   3  62 124 808   0   0   2   3   1
                      171       7160 0   0    0  2882  228   331  15  24   0   0   0   0   0   0   0   2
                      171            0   0    0     0    0     0   0   0   0   0   0  10   0   0   0   3
                      190       7160 0477044300 61776 3764   146  11  11 160 8161290   0   0   0   0   1
                      190       7160 0   0    0  7706  484  2115  13  65   0   1   0   0   0   0   0   2
                      190            0477044300     0    0     0   0   0   5  10   0  20   0   0   0   3
                      191       7160 0482044300 6177611602   468  32  35 51921514320   0   0   0   0   1
                      191       7160 0   0    0 26820 2017  4398  91 139  60   1   0   0   0   0   0   2
                      191            0   0    0     0    0     0   0   0   3   5   0  15   0   0   0   3
                      192       7160 0487044300 6177614827   724  34  42 79313815397   0   0   0   0   1
                      192       7160 0   0    0 37740 2678  7790  30 291  60   0   0   0   0   0   0   2
                      192            0   0    0     0    0     0   0   0   0   0   0   5   0   0   0   3
                      193       7160 0492044300 6177615394   747  37  41 81919065741   0   0   2   3   1
                      193       7160 0   0    0 35718 3156  1907  45 195  15   0   0   0   0   0   0   2
                      193            0   0    0     0    0     0   0   0   0   0   0   5   0   0   0   3
                      194       7160 0497044300 61776 7880   378  21  25 423 7772413  15   0   2   3   1
                      194       7160 0   0    0 15756 1045  3239  16 195  35   1   0   0   0   0   0   2
                      194            0   0    0     0    0     0   0   0   3   5   0  15  10   0   0   3
                      195       7160 0502044300 61776   23    16   1   1  18  18   8   0   0   1   3   1
                      195       7160 0   0    0    86    3    55   0   0   0   0   0   0   0   0   0   2
                      195       7160 0   0    0     0    0     0   0   0   0   0   0   0   0   0   0   3
                      215       7160 0477044250 61776 3763   429  19  26 477 6961384   0   0   0   0   1
                      215       7160 0   0    0  9634  850   612   7  42   0   0   0   0   0   0   0   2
                      215            0477044250     0    0     0   0   0   0   0   0  10   0   0   0   3
                      216       7160 0482044250 6177613677   874  45  54 97213844563   0   0   0   0   1
                      216       7160 0   0    0 43352 243417782   3 155   0   1   0   0   0   0   0   2
                      216            0   0    0     0    0     0   0   0   1   3   0  15   0   0   0   3
   OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.30        DATE: 01/27/33 (23027)        PAGE     38
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS             VOL=STOR02   OPT: LN/PG=51              THOLD=10
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MEMBER NAME: PHIL      (CONT)                     ALIASES: NONE
                   217     7160 0487044250 6177622521  903  45  52 99025857580   0   0   0   0   1
                   217     7160 0    0   0101373 518745073  17 407   0   0   0   0   0   0   0   2
                   217          0    0   0     0    0    0   0   0   1   3   0   5   0   0   0   3
                   218     7160 0492044250 61776 5645  612  37  41 67616372042  20   0   0   0   1
                   218     7160 0    0   0 35078 195014143  53 123  80   1   0   0   0   0   0   2
                   218          0492044250     0    0    0   0   0   1   3   0   5   0   0   0   3
                   219     7160 0497044250 61776   61   47   5   5  53 192   3  20   0   0   0   1
                   219     7160 0    0   0  1505   60  827   0   7   0   1   0   0   0   0   0   2
                   219     7160 0    0   0     0    0    0   0   0   0   0   0   0   0   0   0   3
                   240     7160 0477044200 6177618364  555  33  36 60521026357   0   0   0   0   1
                   240     7160 0    0   0 35817 2700 6022  39 248  60   0   0   0   0   0   0   2
                   240          0477044200     0    0    0   0   0   0   0   0   5   0   0   0   3
                   241     7160 0482044200 6177617735 1388  91 109153950167280  45   0   0   0   1
                   241 .   7160 0    0   02938192341248873  85 993 100   1   0   0   0   0   0   2
                   241          0    0   0     0    0    0   0   0   1   3   0   5   0   0   0   3
                   242     7160 0487044200 61776 6472  689  55  61 76132982435  25   0   0   0   1
                   242     7160 0    0   01479161108634130  12 257  30   1   0   0   0   0   0   2
                   242          0    0   0     0    0    0   0   0   1   3   0   5   0   0   0   3
                   243     7160 0492044200 61776   10   11   1   2  12  78   3   7   0   0   0   1
                   243     7160 0    0   0   344   15  180   0   1   0   0   0   0   0   0   0   2
                   243     7160 0    0   0     0    0    0   0   0   0   0   0   0   0   0   0   3
                   266     7160 0477044150 61776 4812  262  18  19 28610761591  11   6  49  86   1
                   266     7160 0    0   0 14325  896 3527   0 170  60   1   0   0   0   0   0   2
                   266          0477044150     0    0    0   0   0   0   0   0  20  10   0   0   3
                   267     7160 0482044150 6177610652  512  29  34 57112253591  45   6  49  86   1
                   267     7160 0    0   0 33121 2802 3680  10 127  90   1   0   0   0   0   0   2
                   267          0    0   0     0    0    0   0   0   0   0   0   0   5   0   0   3
                   268     7160 0487044150 61776 3508  199  16  18 224 7921176  25   0   0   0   1
                   268     7160 0    0   0 14656 1132 3032   0  24  60   1   0   0   0   0   0   2
                   268          0477044100     0    0    0   0   0   0   0   0   2   0   0   0   3
                   293     7160 0477044100 61776   49   87   5   5  97 124  17   0 138  862430   1
                   293     7160 0    0   0  1441  104  328   0   6  20   0   0   0   0   0   0   2
                   293          0    0   0     0    0    0   0   0   0   0   0  10   5   0   0   3
                   294     7160 0482044100 61776   54  101   7   8 112 224   3  25   6  49  86   1
                   294     7160 0    0   0  5973  568  252   0   3   0   1   0   0   0   0   0   2
                   294     7160 0    0   0     0    0    0   0   0   0   0   0   0   0   0   0   3
                   295     7160 0487044100 61776   15    1   1   1   1  43   1   0   0   0   0   1
                   295     7160 0    0   0  1457  145    2   0   0   0   0   0   0   0   0   0   2
                   295          0    0   0     0    0    0   0   0   0   0   0   0   0   0   0   3
                   239     7160 0472044200     0  107   11   0   1  12  21  39   0   0   0   0   1
                   239                        259   23    3   0   3   0   0   0   0   0   0   0   2

          ***** END OF MEMBER 'PHIL' *****                                       92 LINE(S) IN THIS MEMBER
   OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4    TIME:  16.49.30        DATE: 01/27/83 (83027)        PAGE    39
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS             VOL=STOR02   OPT: LN/PG=51             THOLD=10
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MEMBER NAME: SALEM                                    ALIASES: NONE
                    345       4900 0457044000 61776  177  186 201   0  90   0   0  15   0   0   0   1
                    345       4900 0    0    0   65   23   38   3   0   0   1   0   0   0  74  26   2
                    345       4900 0457044000    43    4    0   0   0   0   0   0   5   0   0   0   3
                    346       4900 0462044000 61776  532  558 602   0 271   0   0   4   0   0   0   1
                    346       4900 0    0    0  195   70  114  10   1  30   1   0   0   0 221  79   2
                    346       4900 0    0    0  129   12    0   0   0   0   0  20   5   0   0   0   3
                    374       4900 0457043950 61776 8724 88769125    01391   0   0   7   0   0   0   1
                    374       4900 0    0    0 2264 1841  341   8  73  40   1   0   0   023441902   2
                    374       4900 0457043950   356    9    0   0   0   0   5  15  10   0   0   0   3
                    375       4900 0462043950 61776 1647 17131831   0 527   0   0   0   0   0   0   1
                    375       4900.0    0    0  349  132  138  18  10   0   0   0   0   0 392 148   2
                    375       4900 0    0    0  212   21    0   0   0   5  10  40  40   5   0  15   3
                    376       4900 0467043950 61776  489  514 562   0 228   0   0   0   0   0   0   1
                    376       4900 0    0    0  131   46   71  13   1   0   0   0   0   0 149  53   2
                    376       4900 0    0    0   81   15    0   0   0   0   5  10  10   5   0   5   3
                    397       4900 0452043900 61776 1217 12551320   0  86   0   0  15   0   0   0   1
                    397       4900 0    0    0  652  142  506   0   5   0   1   0   0   0 705 154   2
                    397       4900 0452043900   546    0    0   0   0   0   0   0   5   0   0   0   3
                    398       4900 0457043900 61776 4407 45464798   0 512   0   0   0   0   0   0   1
                    398       4900 0    0    0 1168  288  835  10  34  10   1   0   0   01263 312   2
                    398       4900 0    0    0  903   11    0   0   0   5  10  10  20  15   0  15   3
                    399       4900 0462043900 61776 2875 29733160   0 509   0   0   0   0   0   0   1
                    399       4900 0    0    0  245  100   99  19  27   0   0   0   0   0 271 110   2
                    399       4900 0    0    0  110   21    0   0   0  25  35  30  20   0   0  60   3
                    400       4900 0467043900 61776 1005 10571168   0 382   0   0   0   0   0   0   1
                    400       4900 0    0    0  142   76   30  34   2   0   0   0   0   0 160  84   2
                    400       4900 0    0    0   33   40    0   0   0   0   5  70  20   0   0   5   3
                    401       4900 0472043900 61776  817  854 935   0 286   0   0   0   0   0   0   1
                    401       4900 0    0    0  146  106   12  26   3  20   0   0   0   0 162 116   2
                    401       4900 0    0    0   13   30    0   0   0   0   5  25  10   0   0   5   3
                    402       4900 0477043900 61776  259  273 303   0  93   0   0   0   0   0   0   1
                    402       4900 0    0    0   19   10    0   9   0   0   0   0   0   0  22  11   2
                    402       4900 0    0    0    0   11    0   0   5   0   5   5  10   0   0  10   3
                    403       4900 0482043900 61776   68   72  78   0  23   0   0   0   0   0   0   1
                    403       4900 0    0    0    7    5    0   2   0   0   0   0   0   0   8   5   2
                    403       4900 0    0    0    0    2    0   0   0   0   0   0   0   0   0   0   3
                    418       4900 0447043850 61776    0    0   0   0   0   0   0   0   0   0   0   1
                    418       4900 0    0    0    0    0    0   0   0   0   1   0   0   0   0   0   2
                    418       4900 0447043850     0    0    0   0   0   0   0   0   0   5   0   0   3
                    419       4900 0452043850 61776 5325 54895773   0 378   0   0   8   0   0   0   1
                    419       4900 0    0    0 2854  622 2212   0  20   0   1   0   0   03082 672   2
                    419       4900 0452043850  2389    0    0   0   0   5  10   0  15  10   0  15   3
                    420       4900 0457043850 61776 2941 30333192   0 304   0   0   0   0   0   0   1
                    420       4900 0    0    0 1560  327 1217   6  10   0   1   0   0   01686 353   2
                    420       4900 0    0    0 1315    7    0   0   0   0   5   0   0  20   0   5   3
                    421       4900 0462043850 61776  568  589 625   0 308   0   0   0   0   0   0   1
                    421       4900 0    0    0  253   19  221  17   0   0   0   0   0   0 283  21   2
                    421       4900 0    0    0  244   18    0   0   0   5   5  80  10   0   0  10   3
                    422       4900 0467043850 61776 1770 18331967   0 631   0   0   0   0   0   0   1
                    422       4900 0    0    0  545  355  136  43  11  20   0   0   0   0 597 387   2
                    422       4900 0    0    0  149   48    0   0   0   5   5  70  15   0   0  10   3
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    OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)        PAGE     40
PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS               VOL=STOR02    OPT: LN/PG=51               THOLD=10
   ------------------------------------------------------------------------------------------------------------------------

MEMBER NAME: SALEM    (CONT)                           ALIASES: NONE
                    423        4900 0472043850 61776 2579 26802898   0 864    0   0   0    0   0   0    1
                    423        4900 0   0    0   644  502   58  68  16  20    1   0   0    0 706 549    2
                    423        4900 0   0    0    63   77    0   0   0   0    5  70  20    0   0   5    3
                    424        4900 0477043850 61776  839  881 968   0 289    0   0   0    0   0   0    1
                    424        4900 0   0    0    76   48    1  25   2   0    0   0   0    0  88  56    2
                    424        4900 0   0    0     1   29    0   0   5   0    5  65  20    0   0  10    3
                    425        4900 0482043850 61776  682  715 783   0 230    0   0   0    0   0   0    1
                    425        4900 0   0    0    67   46    1  19   2  15    0   0   0    0  78  52    2
                    425        4900 0   0    0     1   21    0   0  10   0    5  45  10    0   0  15    3
                    426        4900 0487043850 61776  102  107 117   0  34    0   0   0    0   0   0    1
                    426        4900 0   0    0    10    7    0   3   0   0    0   0   0    0  12   8    2
                    426        4900 0   0    0     0    3    0   0   0   0    5  10   0    0   0   5    3
                    441        4900 0452043800 61776 2282 23532474   0 162    0   0   8    0   0   0    1
                    441        4900 0   0    0  1223  267  948   0   9   0    1   0   0    01321 288    2
                    441        4900 0452043800  1024    0    0   0   0   0    0   0   5   50   0   0    3
                    442        4900 0457043800 61776 6320 64316638   0 840    0   0   0    0  25   0    1
                    442        4900 0   0    0  4417 1677 1594  551091  20    1   0   0    046041738    2
                    442        4900 0   0    0  1685   57    0   0   0   0    0   0  10   20   0   0    3
                    443        4900 0462043800 61776  686  713 762   0 344    0   0   0    0  25   0    1
                    443        4900 0   0    0   232   27  190  15   0  30    0   0   0    0 256  30    2
                    443        4900 0   0    0   209   16    0   0   0   5    5  75  15    0   0  10    3
                    444        4900 0467043800 61776  547  572 619   0 237    0   0   0    0   0   0    1
                    444        4900 0   0    0    79   26   48   5   0  40    1   0   0    0  88  29    2
                    444        4900 0   0    0    53    6    0   0   0  20   15  35  25    0   0  35    3
                    445        4900 0472043800 61776  634  719 788   0 264    0   0   0    0   0   0    1
                    445        4900 0   0    0    43   31    1  11   1   0    0   0   0    0  50  36    2
                    445        4900 0   0    0     1   12    0   0   0  15   10  45  25    0   0  25    3
                    446        4900 0477043800 61776  994 10431141   0 344    0   0   0    0   0   0    1
                    446        4900 0   0    0    92   64    1  24   3   0    1   0   0    0 106  74    2
                    446        4900 0   0    0     1   27    0   0   0   0    5  65  25    0   0   5    3
                    447        4900 0482043800 61776 2718 28143010   01360    0   0   0    0   0   0    1
                    447        4900 0   0    0  1140  788  218  74  60  30    1   0   0    01233 850    2
                    447        4900 0   0    0   237   81    0   0  15   0    5  45  20    0   0  20    3
                    448        4900 0487043800 61776  972 10311142   0 222    0   0   0    0   0   0    1
                    448        4900 0   0    0   121   64   41  12   4   0    0   0   0    0 142  75    2
                    448        4900 0   0    0    49   14    0   0  25   5    5  15  15    0   0  35    3
                    449        4900 0492043800 61776  177  188 209   0  35    0   0   0    0   0   0    1
                    449        4900 0   0    0    23   12    9   2   1   0    0   0   0    0  27  14    2
                    449        4900 0   0    0    11    2    0   0   5   0    5   0   0    5   0  10    3
                    460        4900 0452043750 61776  313  325 350   0 280    0   0  20    0   0   0    1
                    460        4900 0   0    0    13   13    0   0   0   0    0   0   0    0  14  14    2
                    460        4900 0452043750     0    0    0   0   0   0    5  10  10   10   0   5    3
                    461        4900 0457043750 61776 4470 45494710   01194    0   0   0    0  25   0    1
                    461        4900 0   0    0  2894 1239  619 148 887   0    0   0   0    029991281    2
                    461        4900 0   0    0   638  167    0   0   0   5    5  25  35   15   0  10    3
                    462        4900 0462043750 61776 1118 11661268   0 475    0   0   0    0  25   0    1
                    462        4900 0   0    0   194   68   17 110   0   0    0   0   0    0 223  76    2
                    462        4900 0   0    0    19  127    0   0   0  10    5  45  30    5   0  15    3
                    463        4900 0467043750 61776  853  892 970   0 340    0   0   0    0   0   0    1
                    463        4900 0   0    0    50   47    1   1   0   0    1   0   0    0  57  53    2
                    463        4900 0   0    0     1    2    0   0   0  40    0  25  25    0   0  40    3
    OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.30        DATE: 01/27/83 (83027)          PAGE      41
 PDS=CN1511.ESI.PHIL79.AQALLOC.PARMS             VOL=STOR02    OPT: LN/PG=51              THOLD=10
  -------------------------------------------------------------------------------------------------------------------------------
 MEMBER NAME: SALEM     (CONT)                          ALIASES: NONE
                          464       4900 0472043750 61776  709   744 809    0 285    0    0    0    0    0    0    1
                          464       4900 0    0     0   40   36     1   3    1   0    0    0    0    0   45   41    2
                          464       4900 0    0     0    1    3     0   0    5  30    5   25   30    0    0   40    3
                          465       4900 0477043750 61776  504   530 580    0 172    0    0    0    0    0    0    1
                          465       4900 0    0     0   42   29     7   5    1   0    0    0    0    0   48   33    2
                          465       4900 0    0     0    8    6     0   0    5   0    5   25   10    0    0   10    3
                          466       4900 0482043750 61776 1180  12561396    0 236    0    0    0    0    0    0    1
                          466       4900 0    0     0  155   77    63  10    5  30    1    0    0    0  183   91    2
                          466       4900 0    0     0   74   12     0   0   15   5    5   25   30    0    0   25    3
                          467       4900 0487043750 61776 1475  15701745    0 295    0    0    0    0    0    0    1
                          467       4900 0    0     0  194   96    79  13    6   0    0    0    0    0  229  114    2
                          467       4900 0    0     0   93   15     0   0   25  15   15   20   20    0    0   55    3
                          468       4900 0492043750 61776  413   440 489    0  83    0    0    0    0    0    0    1
                          468       4900 0    0     0   54   27    22   4    2   0    1    0    0    0   64   32    2
                          468       4900 0    0     0   26    4     0   0   15   5    5   10    0    5    0   25    3
                          475       4900 0452043700 61776  229   239 260    0 192    0    0   20    0    0    0    1
                          475       4900 0    0     0  121   12     0 108    0   0    1    0    0    0  140   14    2
                          475       4900 0452043700      0  126     0   0    0   0    0    0    5   25    0    0    3
                          476       4900 0457043700 61776  440   463 506    0 344    0    0    0    0    0    0    1
                          476       4900 0    0     0  464   31     0 434    0   0    1    0    0    0  538   35    2
                          476       4900 0    0     0    0  503     0   0    0   0    5   10   20   25    0    5    3
                          477       4900 0462043700 61776  458   482 528    0 288    0    0    0    0    0    0    1
                          477       4900 0    0     0  468   34     0 434    0   0    1    0    0    0  542   39    2
                          477       4900 0    0     0    0  503     0   0    0  15    0   40   20    0    0   15    3
                          478       4900 0467043700 61776  935   9751062    0 397    0    0    0    0    0    0    1
                          478       4900 0    0     0  167   58     1 108    0   0    1    0    0    0  193   65    2
                          478       4900 0    0     0    1  126     0   0   15  45   20   10   10    0    0   80    3
                          479       4900 0472043700 61776  369   387 420    0 148    0    0    0    0    0    0    1
                          479       4900 0    0     0   21   19     0   1    0   0    0    0    0    0   24   22    2
                          479       4900 0    0     0    0    1     0   0    0   5    0   25    5    0    0    5    3
                          480       4900 0487043700 61776 1180  12561396    0 236    0    0    0    0    0    0    1
                          480       4900 0    0     0  155   77    63  10    5   0    0    0    0    0  183   91    2
                          480       4900 0    0     0   74   12     0   0   20   5    5   20   15   10    0   30    3
                          485       4900 0452043650 61776   79    83  92    0  58    0    0   15    0    0    0    1
                          485       4900 0    0     0  115    6     0 108    0   0    1    0    0    0  133    7    2
                          485       4900 0452043650      0  126     0   0    0   0    0    0    5   20    0    0    3
                          486       4900 0457043650 61776  315   333 366    0 232    0    0    0    0    0    0    1
                          486       4900 0    0     0  459   26     0 434    0   0    1    0    0    0  533   30    2
                          486       4900 0    0     0    0  503     0   0    0   0    5    0    5   40    0    5    3
                          487       4900 0462043650 61776  205   217 238    0 151    0    0    0    0    0    0    1
                          487       4900 0    0     0  298   17     0 282    0   0    0    0    0    0  346   19    2
                          487       4900 0    0     0    0  327     0   0    0   5    0   25   15   20    0    5    3
                          492       4900 0452043600 61776    0     0   0    0   0    0    0   17    0    0    0    1
                          492       4900 0    0     0    0    0     0   0    0   0    1    0    0    0    0    0    2
                          492       4900 0    0     0    0    0     0   0    0   0    0    0    0   50    0    0    3
                          493       4900 0457043600 61776   31    33  37    0  23    0    0   10    0    0    0    1
                          493       4900 0    0     0   46    3     0  43    0   0    1    0    0    0   53    3    2
                          493       4900 0457043600      0   50     0   0    0   0    0    0    0   15    0    0    3
        ***** END OF MEMBER 'SALEM' *****                                          150 LINE(S) IN THIS MEMBER
```

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     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)          PAGE      1
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS             VOL=STOR02   OPT: LN/PG=51               THOLD=10
 -------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: BUCK                                      ALIASES: NONE
                              1       1200 0477044900 61776    85     9    1    1    9    6   30    0    0    0    0    1
                              1       1200 0    0   0   141     7    49    0    2    0    0    0    0    0    0    0    2
                              1       1200 0477044900     0     0     0    0    2   15   20    0   60    0    0    0    3
                              2       1200 0482044900 61776   161    25    1    1   27   17   58    0    0    0    0    1
                              2       1200 0    0   0   274    14    93    0    3    0    1    0    0    0    0    0    2
                              2       1200 0    0   0     0     0     0    0    0    5   10    0   80    0    0    0    3
                              3       1200 0472044850 61776    80     3    0    0    3    2   27    0    0    0    0    1
                              3       1200 0    0   0    74     4     2    0    3    0    0    0    0    0    0    0    2
                              3       1200 0    0   0     0     0     0    0    0    5   10   40   40    0    0    0    3
                              4       1200 0477044850 61776   145    10    1    1   12    6   49    0    0    0    0    1
                              4       1200 0    0   0   176    10    27    0    5    0    0    0    0    0    0    0    2
                              4       1200 0    0   0     0     0     0    0    2   15   30   10   40    0    0    0    3
                              5       1200 0482044850 61776    69    15    1    1   16    4   23    0    0    0    0    1
                              5       1200 0    0   0   137    10    31    0    1    0    0    0    0    0    0    0    2
                              5       1200 0    0   0     0     0     0    0    0   10   20    0   65    0    0    0    3
                              6       1200 0487044850 61776   168    25    2    2   27   12   59    0    0    0    0    1
                              6       1200 0    0   0   190    14    26    1    1    0    0    0    0    0    0    0    2
                              6       1200 0    0   0     0     0     0    0   10   35   50    0    2    0    0    0    3
                              7       1200 0492044850 61776    80     9    1    1   10    5   28    0    0    0    0    1
                              7       1200 0    0   0    81     6     4    4    1    0    1    0    0    0    0    0    2
                              7       1200 0492044850     0     0     0    0    0    5   15    0   20    0    0    0    3
                              8       1200 0467044800 61776   134    19    1    1   21    4   46    0    0    0    0    1
                              8       1200 0    0   0   276    11   107    1    5   20    0    0    0    0    0    0    2
                              8       1200 0467044800     0     0     0    0    2   30   50    0   15    0    0   10    3
                              9       1200 0472044800 61776   199    34    2    2   36   13   66    0    0    0    0    1
                              9       1200 0    0   0   433    21   162    1    5    0    0    0    0    0    0    0    2
                              9       1200 0    0   0     0     0     0    0    0    2    5   25   65    0    0    0    3
                             10       1200 0477044800 61776    82     7    0    0    7    5   27    0    0    0    0    1
                             10       1200 0    0   0    58     3     3    0    2    0    0    0    0    0    0    0    2
                             10       1200 0    0   0     0     0     0    0   15   20   45    0   20    0    0    0    3
                             11       1200 0482044800 61776    74    13    1    1   15    4   24    0    0    0    0    1
                             11       1200 0    0   0   106     8    16    1    1    0    0    0    0    0    0    0    2
                             11       1200 0    0   0     0     0     0    0    5   10   10   20   45    0    0    0    3
                             12       1200 0487044800 61776   114    16    1    1   18    5   39    0    0   38    0    1
                             12       1200 0    0   0   164    12    14    8    1    0    0    0    0    0    0    0    2
                             12       1200 0    0   0     0     0     0    0    5   15   15    0   50    0    0    0    3
                             13       1200 0492044800 61776    47     5    0    0    6    2   16    0    0   38    0    1
                             13       1200 0    0   0    58     4     1    4    1    0    1    0    0    0    0    0    2
                             13       1200 0492044800     0     0     0    0    1    4    5    0   30    0    0    0    3
                             14       1200 0462044750 61776   213    30    2    2   34    8   68    0    0    0    0    1
                             14       1200 0    0   0   370    14   208    3    2    0    0    0    0    0    0    0    2
                             14       1200 0462044750     0     0     0    0    1    5    5   25   50    0    0    0    3
                             15       1200 0467044750 61776   940   207   10   13  229   36  358    0    1   68   90    1
                             15       1200 0    0   0  6288   273  3241   16   28   25    0    0    0    0    0    0    2
                             15       1200 0    0   0     0     0     0    0    1    5    5   25   40    0    0   10    3
                             16       1200 0472044750 61776   481    95    5    6  105   23  175    0    0    0    0    1
                             16       1200 0    0   0  1859    98   709   13   13   10    0    0    0    0    0    0    2
                             16       1200 0    0   0     0     0     0    0    2    5   10   10   60    0    0    5    3
                             17       1200 0477044750 61776   130    16    1    1   18    6   44    0    0    0    0    1
                             17       1200 0    0   0   107    12    22    1    4    0    0    0    0    0    0    0    2
                             17       1200 0    0   0     0     0     0    0    2   30   50    0   18    0    0    0    3
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   OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)        PAGE       2
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS             VOL=STOR02   OPT: LN/PG=51                THOLD=10
   ----------------------------------------------------------------------------------------------------------------------

MEMBER NAME: BUCK     (CONT)                         ALIASES: NONE
    18        1200 0482044750 61776  103   14   1   1  15   4  35   0   0   0   0   1
    18        1200 0    0   0   141    8   29   2   3   0   0   0   0   0   0   0   2
    18        1200 0    0   0     0    0    0   0   1   2   5  60  25   0   0   0   3
    19        1200 0487044750 61776  148   18   1   1  20   5  51   0   0  38   0   1
    19        1200 0    0   0   223   12   47  10   4   0   0   0   0   0   0   0   2
    19        1200 0    0   0     0    0    0   0   1   5  10  55  25   0   0   0   3
    20        1200 0492044750 61776   75    9   0   1  10   2  26   0   0  38   0   1
    20        1200 0    0   0   146    7   39   9   2   0   1   0   0   0   0   0   2
    20        1200 0492044750     0    0    0   0   3   7  15   5  15   0   0   0   3
    22        1200 0457044700 61776   32   12   1   1  14   2  11   0   0   2   0   1
    22        1200 0    0   0    65    3   28   0   1   0   0   0   0   0   0   0   2
    22        1200 0457044700     0    0    0   0   0   0   0  15  15   0   0   0   3
    23        1200 0462044700 61776  162   39   2   2  44   8  53   0   0   0   0   1
    23        1200 0    0   0   299   12  150   1   3   0   0   0   0   0   0   0   2
    23        1200 0462044700     0    0    0   0   4  15  24   8  28   0   0   0   3
    24        1200 0467044700 61776  388  150   8   9 168  21 130   0   0  45  60   1
    24        1200 0    0   0   903   51  336   6   4   0   0   0   0   0   0   0   2
    24        1200 0    0   0     0    0    0   0   2  15  25  10  45   0   0   0   3
    25        1200 0472044700 61776  493   51   3   3  57  13 174   0   0  51   0   1
    25        1200 0    0   0  1370   78  426   9  14  35   0   0   0   0   0   0   2
    25        1200 0    0   0     0    0    0   0   5  20  40   0  30   0   0  10   3
    26        1200 0477044700 61776  260   35   2   2  39   8  88   0   0   0   0   1
    26        1200 0    0   0   483   35   40   3   8   0   0   0   0   0   0   0   2
    26        1200 0    0   0     0    0    0   0   1   1   1  50  42   0   0   0   3
    27        1200 0482044700 61776  106   14   1   1  16   3  36   0   0   0   0   1
    27        1200 0    0   0   165    8   46   3   4   0   0   0   0   0   0   0   2
    27        1200 0    0   0     0    0    0   0   1   1   1  65  20   0   0   0   3
    28        1200 0487044700 61776  198   28   1   2  31   5  68   0   0   0   0   1
    28        1200 0    0   0   540   19  219  27  10   0   0   0   0   0   0   0   2
    28        1200 0    0   0     0    0    0   0   0   0   0  65  30   0   0   0   3
    29        1200 0492044700 61776  199   25   1   2  28   4  71   0   0   0   0   1
    29        1200 0    0   0   556   22  215  27   9   0   1   0   0   0   0   0   2
    29        1200 0    0   0     0    0    0   0   5   3   5  30  50   0   0   0   3
    30        1200 0497044700 61776   93    7   0   0   8   2  36   0   0   0   0   1
    30        1200 0    0   0   157   12   22   1   1   0   1   0   0   0   0   0   2
    30        1200 0497044700     0    0    0   0   2   1   1  25  20   0   0   0   3
    35        1200 0462044650 61776   29    4   0   0   5   1   9   0   0   0   0   1
    35        1200 0    0   0    61    4   19   0   0   0   0   0   0   0   0   0   2
    35        1200 0462044650     0    0    0   0   4   6   6   0   3   0   0   0   3
    36        1200 0467044650 61776  178   22   1   1  25   4  59   0   0   0   0   1
    36        1200 0    0   0   432   34   74   1   2   0   0   0   0   0   0   0   2
    36        1200 0    0   0     0    0    0   0   5  15  30  10  12   0   0   0   3
    37        1200 0472044650 61776 1276  148   8   9 165  31 452   0   0   0   0   1
    37        1200 0    0   0  6287  233 3720   8  20   0   0   0   0   0   0   0   2
    37        1200 0    0   0     0    0    0   0   1   1   3   7  40   0   0   0   3
    38        1200 0477044650 61776  341   44   2   3  49  17 109   0   0   0   0   1
    38        1200 0    0   0   726   45  236   1   2   0   0   0   0   0   0   0   2
    38        1200 0    0   0     0    0    0   0   5   5   5  30  50   0   0   0   3
    39        1200 0482044650 61776  367   82   4   5  91  21 120   0   0   0   0   1
    39        1200 0    0   0  1106   27  764   8   4   0   0   0   0   0   0   0   2
    39        1200 0    0   0     0    0    0   0   1   2   5  65  20   0   0   0   3
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MEMBER NAME: BUCK      (CCNT)                           ALIASES: NONE

                        40       1200 0487044650 61776   174    25    1    2   28    4   60    0    0    0    0    1
                        40       1200 0    0    0   603    26   219   24   10    0    0    0    0    0    0    0    2
                        40       1200 0    0    0     0     0     0    0    0    0    0   70   25    0    0    0    3
                        41       1200 0492044650 61776   270    40    2    3   44    7   95    0    0    0    0    1
                        41       1200 0    0    0  1227    79   262   11   16    0    0    0    0    0    0    0    2
                        41       1200 0    0    0     0     0     0    0    2    1    1   80   10    0    0    0    3
                        42       1200 0497044650 61776   148    14    1    1   16    4   56    0    0    0    0    1
                        42       1200 0    0    0   314    23    53    3    2   25    1    0    0    0    0    0    2
                        42       1200 0    0    0     0     0     0    0    5    5   10   40   30    0    0    0    3
                        43       1200 0502044650 61776   278    46    2    2   52   14  126    0    0    0    0    1
                        43       1200 0    0    0  2106    93  1058    2    8   20    1    0    0    0    0    0    2
                        43       1200 0502044650       0     0     0    0    1    2    2   20   15    0    0    0    3
                        53       1200 0467044600 61776    12     3    0    0    4    0    4    0    0    0    0    1
                        53       1200 0    0    0    40     3    10    0    0    0    0    0    0    0    0    0    2
                        53       1200 0467044600       0     0     0    0    0    0    0    0   95    0    0    0    3
                        54       1200 0472044600 61776   334   119    6    7  132   16  111    0    0    0    0    1
                        54       1200 0    0    0  1542    91   585    4    4    0    0    0    0    0    0    0    2
                        54       1200 0    0    0     0     0     0    0    0    0    0   10   35    0    0    0    3
                        55       1200 0477044600 61776   522    53    3    4   59   10  162    0    0    0    0    1
                        55       1200 0    0    0  1345    75   431   17   14    0    0    0    0    0    0    0    2
                        55       1200 0    0    0     0     0     0    0    1    1    2   50   45    0    0    0    3
                        56       1200 0482044600 61776   556    41    2    2   46   21  154    0    0    0    0    1
                        56       1200 0    0    0  1101    64   265   20   15   20    0    0    0    0    0    0    2
                        56       1200 0    0    0     0     0     0    0    5    2    2   40   45    0    0    0    3
                        57       1200 0487044600 61776  1461   174    8   11  193   46  533    0    6  112  103    1
                        57       1200 0    0    0  8278   620  1462  138   44   20    0    0    0    0    0    0    2
                        57       1200 0487044600       0     0     0    0    2    2    5   30   40    0   30    0    3
                        58       1200 0492044600 61776   321    48    3    3   54    9  106    0    0    0    0    1
                        58       1200 0    0    0  1151    78   234    9   12   20    0    0    0    0    0    0    2
                        58       1200 0    0    0     0     0     0    0    5    5    5   40   40    0   40    0    3
                        59       1200 0497044600 61776   195    28    1    2   31    7   64    0    0    0    0    1
                        59       1200 0    0    0   527    31   122    4    8   15    0    0    0    0    0    0    2
                        59       1200 0    0    0     0     0     0    0    5    5    5   50   30    0   50    0    3
                        60       1200 0502044600 61776   157     5    0    0    6    5   53    0    0    0    0    1
                        60       1200 0    0    0   168    14    12    4    1    0    1    0    0    0    0    0    2
                        60       1200 0    0    0     0     0     0    0   10   20   40    5   23    0    5    0    3
                        61       1200 0507044600 61776    74     1    0    0    1    2   23    0    0    0    0    1
                        61       1200 0    0    0    60     5     0    2    0    0    1    0    0    0    0    0    2
                        61       1200 0507044600       0     0     0    0    2    2    5    7   20    0    7    0    3
                        74       1200 0477044550 61776   381    49    3    3   55    8  113    0    0    0    0    1
                        74       1200 0    0    0   754    37   182   29   17   20    0    0    0    0    0    0    2
                        74       1200 0477044550       0     0     0    0    0    0    0   12   23    0   12    5    3
                        75       1200 0482044550 61776   706   109    6    7  122   24  213    0    0    0    0    1
                        75       1200 0    0    0  1832    91   431   98   30   10    0    0    0    0    0    0    2
                        75       1200 0    0    0     0     0     0    0    0    0    0   60   30    0   60    2    3
                        76       1200 0487044550 61776   770   101    5    7  113   15  234    0    0    7   90    1
                        76       1200 0    0    0  2206   141   651    9   13    0    0    0    0    0    0    0    2
                        76       1200 0    0    0     0     0     0    0    0    2    5   30   60    0   30    0    3
                        77       1200 0492044550 61776   205    36    2    2   40    8   64    0    0    0    0    1
                        77       1200 0    0    0   462    36    51    5    4    0    0    0    0    0    0    0    2
                        77       1200 0    0    0     0     0     0    0    0    2    5   40   50    0   40    0    3
```

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   OSI DATA MANAGEMENT UTILITY "PDSLIST"         VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (33027)         PAGE      4
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                   VOL=STOR02   OPT: LN/PG=51              THOLD=10
   ----------------------------------------------------------------------------------------------------------------------

MEMBER NAME: DUCK      (CONT)                         ALIASES: NONE
                    78      1200 0497044550 61776  328   46   3   3  52  11 100   0   0   7  90   1
                    78      1200 0    0    0  1177   35  352   7  44  30   0   0   0   0   0   0   2
                    78      1200 0    0    0     0    0    0   0   0   2   5  40  50   0  40   0   3
                    79      1200 0502044550 61776  242   26   1   2  29   8  79   0   0   0   0   1
                    79      1200 0    0    0  1153   55  380  12  19   0   0   0   0   0   0   0   2
                    79      1200 0    0    0     0    0    0   0   2   2   5  50  40   0  50   0   3
                    80      1200 0507044550 61776  257   48   3   4  54   8  73   0   0   0   0   1
                    80      1200 0    0    0   452   33   90   7   2   0   0   0   0   0   0   0   2
                    80      1200 0    0    0     0    0    0   0   1   1   5  60  30   0  60   0   3
                    81      1200 0512044550 61776  116   30   2   2  34   4  35   0   0   0   0   1
                    81      1200 0    0    0   160   12   28   1   1   0   1   0   0   0   0   0   2
                    81      1200 0    0    0     0    0    0   0   0   3   3  10  10   0  10   0   3
                    97      1200 0482044500 61776  130   25   1   2  27   3  40   0   0   0   0   1
                    97      1200 0    0    0   465   25  159   2   4   0   0   0   0   0   0   0   2
                    97      1200 0    0    0     0    0    0   0   0   1   1  16   2   0  16   0   3
                    98      1200 0487044500 61776 1789  109   6   7 122  14 491   0   0  17  10   1
                    98      1200 0    0    0  3333  208 1411  13  31   0   0   0   0   0   0   0   2
                    98      1200 0482044500     0    0    0   0   0   1   1  16  32   0  16   0   3
                    99      1200 0492044500 61776 1414   86   4   5  96  27 382   0   0   0   0   1
                    99      1200 0    0    0  2787  187  615  27  25  40   0   0   0   0   0   0   2
                    99      1200 0    0    0     0    0    0   0   1   1   2  60  20   0  60   0   3
                   100      1200 0497044500 61776  934   37   2   2  41   8 262   0   0   0   0   1
                   100      1200 0    0    0   754   50   47  40  16   0   0   0   0   0   0   0   2
                   100      1200 0    0    0     0    0    0   0   0   0   2  65  25   0  65   0   3
                   101      1200 0502044500 61776  326  141   7   8 157  20 264   0   0   0   0   1
                   101      1200 0    0    0  2193  147  549  26  13  20   0   0   0   0   0   0   2
                   101      1200 0    0    0     0    0    0   0   0   5  10  40  35   0  40   0   3
                   102      1200 0507044500 61776  529  122   7   9 136  13 159   0   1  10   2   1
                   102      1200 0    0    0  1090   77  221  19   7   0   0   0   0   0   0   0   2
                   102      1200 0    0    0     0    0    0   0   0   0   0  75  25   0  75   0   3
                   103      1200 0512044500 61776 1437   90   5   6 101  23 457   0   0   0   0   1
                   103      1200 0    0    0  2536  160  723  33  16   0   1   0   0   0   0   0   2
                   103      1200 0    0    0     0    0    0   0   0   5   5  30  20   0  30   0   3
                   104      1200 0517044500 61776 1134  140   7   9 154  50 404  10   0   0   0   1
                   104      1200 0    0    0  3384  221 1033  10   9   0   1   0   0   0   0   0   2
                   104      1200 0517044500     0    0    0   0   0   0   0   0   3   0   0   0   3
                   121      1200 0437044450 61776  230   12   1   1  14   4  67   0   0   0   0   1
                   121      1200 0    0    0  1063   34  677   2   4   0   0   0   0   0   0   0   2
                   121      1200 0437044450     0    0    0   0   0   0   0   0   2   0   0   0   3
                   122      1200 0492044450 61776 2259  173   9  10 192  50 663   0   0   0   0   1
                   122      1200 0    0    0  3934  510 3357   7  49  10   0   0   0   0   0   0   2
                   122      1200 0    0    0     0    0    0   0   0   0   0   0   8   0   0   0   3
                   123      1200 0497044450 61776 1828  120   7   7 134  32 546   0   0   0   0   1
                   123      1200 0    0    0  2862  176  509  35  54  65   1   0   0   0   0   0   2
                   123      1200 0    0    0     0    0    0   0   0   0   0   0  40   0   0  10   3
                   124      1200 0502044450 61776 1244  153   9  11 173  24 374   0   0   0   0   1
                   124      1200 0    0    0  2022  158  119  31  22  10   1   0   0   0   0   0   2
                   124      1200 0    0    0     0    0    0   0   0   5  10  10  30   0  10  10   3
                   125      1200 0507044450 61776 1065  334  20  25 429  60 532   0   1  30   3   1
                   125      1200 0    0    0  7072  650  330  24  18   0   0   0   0   0   0   0   2
                   125      1200 0    0    0     0    0    0   0   0   5  10  10  25   0  10  10   3
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)        PAGE      5
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                 VOL=STOR02   OPT: LN/PG=51              THOLD=10
  -------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: BUCK      (CONT)                         ALIASES: NONE
                        126       1200 0512044450 61776 3346  208  10  14 231   451030    0    0    0    0    1
                        126       1200 0    0    0  7604  448 2877  16  20   0    0    0    0    0    0    0    2
                        126       1200 0    0    0     0    0    0   0   0   5   10    0   25    0    0   10    3
                        127       1200 0517044450 61776  339   33   2   3  37   19  143   11    0    0    0    1
                        127       1200 0    0    0  6127  120 4843   2  11  10    1    0    0    0    0    0    2
                        127       1200 0    0    0     0    0    0   0   0   5    5    0   80    0    0   15    3
                        128       1200 0522044450 61776   25    0   0   0   0    1   10   12    0    0    0    1
                        128       1200 0    0    0   952   11  820   0   2  30    1    0    0    0    0    0    2
                        128       1200 0522044450     0    0    0   0   0   0    0    0   20    0    0    0    3
                        146       1200 0497044400 61776 1256  198  10  12 220   25  410    0    0    0    0    1
                        146       1200 0    0    0  5868  363 1588  20  60   0    0    0    0    0    0    0    2
                        146       1200 0497044400     0    0    0   0   0   0    0    0    5    0    0    0    3
                        147       1200 0502044400 61776 1898  360  19  23 402   31  634    0    0    0    0    1
                        147       1200 0    0    0  7134  583  920  80  28   0    0    0    0    0    0    0    2
                        147       1200 0    0    0     0    0    0   0   0   0    5    0   55    0    0   10    3
                        148       1200 0507044400 61776 3657  348  18  20 387   831064    1    1   10    2    1
                        148       1200 0    0    0  7580  581 1247  44  42   0    0    0    0    0    0    0    2
                        148       1200 0    0    0     0    0    0   0   0   0    5    0   35    0    0    0    3
                        149       1200 0512044400 61776 3410  155   8  11 171   73  955   11    1   30    3    1
                        149       1200 0    0    0  7308  416 2558   6  52   0    1    0    0    0    0    0    2
                        149       1200 0    0    0     0    0    0   0   0   0    2    0   10    0    0    0    3
                        150       1200 0517044400 61776  110    1   0   0   2    6   42   11    0    0    0    1
                        150       1200 0    0    0  3721   45 3162   0  10  60    1    0    0    0    0    0    2
                        150       1200 0    0    0     0    0    0   0   0   0    0    0   40    0    0   10    3
                        151       1200 0522044400 61776   28    0   0   0   0    1   11   12    0    0    0    1
                        151       1200 0    0    0  1072   12  923   0   2  30    1    0    0    0    0    0    2
                        151       1200 0    044400     0    0    0   0   2   0    0    0   90    0    0    0    3
                        171       1200 0502044350 61776 1979  242  12  15 271   24  692   10    0    0    0    1
                        171       1200 0    0    0  5971  360 1710  24  61  30    1    0    0    0    0    0    2
                        171       1200 0502044350     0    0    0   0   2   0    0    0   40    0    0   10    3
                        172       1200 0507044350 61776 2343  315  17  20 351   43  779   19    0    0    0    1
                        172       1200 0    0    0  7310  296 3796  28  50  20    1    0    0    0    0    0    2
                        172       1200 0    0    0     0    0    0   0   2   1    1    0   20    0    0   10    3
                        173       1200 0512044350 61776 1080   69   4   4  75   34  376   16    0    0    0    1
                        173       1200 0    0    0  6846  324 3447  14  10  40    1    0    0    0    0    0    2
                        173       1200 0512044350     0    0    0   0   0   0    0    0    5    0    0    0    3
                        194       1200 0497044300 61776   17    7   0   0   8    0    7    0    0    0    0    1
                        194       1200 0    0    0   149    4  101   2   0   0    0    0    0    0    0    0    2
                        194       1200 0    0    0     0    0    0   0   0   0    0    0   10    0    0    0    3
                        195       1200 0502044300 61776  435  102   6   7 121    7  155   16    0    0    0    1
                        195       1200 0    0    0  2646   99 1408  23  14   0    1    0    0    0    0    0    2
                        195       1200 0502044300     0    0    0   0   0   0    0    0   30    0    0    0    3
        ***** END OF MEMBER 'BUCK' *****                                                       246 LINE(S) IN THIS MEMBER
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34        DATE: 01/27/85 (85027)          PAGE      6
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                VOL=STOR02   OPT: LN/PG=51                THOLD=10
   ------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: LURL                                             ALIASES: NONE
                          128       0640 0522044450 61776  278    82    5    6   93    4  107    0    0    0    0    1
                          128       0640 0    0    0   593   17   393    0    2   10    0    0    0    0    0    0    2
                          128       0640 0522044450      0    0     0    0    0    2    2    0   15    5    0    4    3
                          129       0640 0527044450 61776   61    18    1    1   21    1   23    0    0    0    0    1
                          129       0640 0    0    0   129    4    86    0    1   30    0    0    0    0    0    0    2
                          129            0    0    0     0    0     0    0    0    0    2    0   15    0    0    2    3
                          149       0640 0512044400 61776  228    24    1    2   26    3   80   11    0    0    0    1
                          149       0640 0    0    0   721   35   421    0    1    0    1    0    0    0    0    0    2
                          149            0512044400      0    0     0    0    0    0    0    0   10    0    0    0    3
                          150       0640 0517044400 61776  294    78    4    5   87    6  102   11    0    0    0    1
                          150       0640 0    0    0  2293   38  1902    1    0   35    1    0    0    0    0    0    2
                          150            0    0    0     0    0     0    0    0    0    0    0   10    0    0    0    3
                          151       0640 0522044400 61776 1011   227   13   15  255   17  350   12    0    0    0    1
                          151       0640 0    0    0  4107  290   997    7   10   45    1    0    0    0    0    0    2
                          151            0    0    0     0    0     0    0    0    2    2   20   30    0    0    4    3
                          152       0640 0527044400 61776  250    54    3    4   61    3   70    0    0    0    0    1
                          152       0640 0    0    0   949   35    69    0    2    0    0    0    0    0    0    0    2
                          152            0    0    0     0    0     0    0    0    5    5   45   45    0    0   10    3
                          153       0640 0532044400 61776  153    11    0    1   13    1   50    0    0    0    0    1
                          153       0640 0    0    0   274   25     8    0    1    0    0    0    0    0    0    0    2
                          153            0    0    0     0    0     0    0    0   10    5   35   30    0    0   15    3
                          172       0640 0507044350 61776  394    46    2    3   51    4  140   19    0    0    0    1
                          172       0640 0    0    0  2511  163   706    6   13   20    1    0    0    0    0    0    2
                          172            0507044350      0    0     0    0    0    0    0    0   10   10    0    0    3
                          173       0640 0512044350 61776 1025   112    5    7  126   18  345   16    0    0    0    1
                          173       0640 0    0    0  6619  321  3003    6   38   35    1    0    0    0    0    0    2
                          173            0    0    0     0    0     0    0    0    0    5    0   20    5    0    5    3
                          174       0640 0517044350 61776  390    98    5    7  110    8  138    0    0    0    0    1
                          174       0640 0    0    0  2352  127  1018    1    4   20    0    0    0    0    0    0    2
                          174            0    0    0     0    0     0    0    0    5    5   30   60    0    0   10    3
                          175       0640 0522044350 61776  179   132   11   13  207    3   56    0    0    0    0    1
                          175       0640 0    0    0   609   53    63    5    1   30    0    0    0    0    0    0    2
                          175            0    0    0     0    0     0    0    0    0    3   50   40    0    0    3    3
                          176       0640 0527044350 61776  155    55    3    4   62    2   40    0    0    0    0    1
                          176       0640 0    0    0   537   50    23    1    1    0    0    0    0    0    0    0    2
                          176            0    0    0     0    0     0    0    5    3    5   55    0    0    0   13    3
                          177       0640 0532044350 61776  436    34    1    2   38    4  175    0    0    0    0    1
                          177       0640 0    0    0   474   44    19    2    1    0    0    0    0    0    0    0    2
                          177            0532044350      0    0     0    0    5    3    5   40   40    0    0   13    3
                          194       0640 0497044300 61776   99    14    1    1   16    2   38   10    0    0    0    1
                          194       0640 0    0    0  1345   67   558    0   11    0    1    0    0    0    0    0    2
                          194            0497044300      0    0     0    0    0    0    0    0   10    0    0    0    3
                          195       0640 0502044300 61776 1973    82    6    6   92   34  602   17    0    0    0    1
                          195       0640 0    0    0  7556  563  2319    6   12   50    1    0    0    0    0    0    2
                          195            0    0    0     0    0     0    0    0    0    0    0   20    0    0    0    3
                          196       0640 0507044300 61776 4434   290   17   19  323   611248    0    0    0    0    1
                          196       0640 0    0    0  6529  552   731   11   20   10    1    0    0    0    0    0    2
                          196            0    0    0     0    0     0    0    0    0    0    0   20    5    0    0    3
                          197       0640 0512044300 61776 1011   372   21   25  397   16  339    0    0    0    0    1
                          197       0640 0    0    0  2959  224   367    2   17    0    0    0    0    0    0    0    2
                          197            0    0    0     0    0     0    0    0    2    3   40   40    0    0    5    3
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34       DATE: 01/27/83 (83027)        PAGE       7
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                 VOL=STOR02   OPT: LN/PG=51                THOLD=10
   -------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: BURL     (CONT)                              ALIASES: NONE
                         198        0640 0517044300 61776  182    61    3    4   69    4   61    0    0    0    0    1
                         198        0640 0    0    0   801    56   176    1    5    0    0    0    0    0    0    0    2
                         198             0    0    0     0     0     0    0    0    2    5   60   30    0    0    7    3
                         199        0640 0522044300 61776   79    44    2    3   50    2   25    0    0    2    0    1
                         199        0640 0    0    0   203    18    13    1    0   35    0    0    0    0    0    0    2
                         199             0    0    0     0     0     0    0    0    0    2   60   35    0    0    2    3
                         200        0640 0527044300 61776  160    60    3    4   66    3   42    0   10    1    0    1
                         200        0640 0    0    0  3032   300    19    2    1   10    0    0    0    0    0    0    2
                         200             0    0    0     0     0     0    0    5    3    5   50   30    0    0   13    3
                         201        0640 0532044300 61776  800    75    3    4   82    5  213    0   30    2    0    1
                         201        0640 0    0    0  6922   687    34    5    1   50    0    0    0    0    0    0    2
                         201             0    0    0     0     0     0    0   10    2    0   40   30    0    0   12    3
                         202        0640 0537044300 61776  539    21    1    1   24    2  136    0   10    1    0    1
                         202        0640 0    0    0  2853   284    14    1    0   10    0    0    0    0    0    0    2
                         202             0    0    0     0     0     0    0   20   10    5    5   20    0    0   35    3
                         218        0640 0492044250 61776    0     0    0    0    0    0    0    9    0    0    0    1
                         218        0640 0    0    0     0     0     0    0    0   70    1    0    0    0    0    0    2
                         218        0640 0492044250     0     0     0    0    0    0    0    0   10    0    0    0    3
                         219        0640 0497044250 61776 2137   277   14   17  307   38  672    9    0    0    0    1
                         219        0640 0    0    0  7477   506  1760   11   53   40    1    0    0    0    0    0    2
                         219             0    0    0     0     0     0    0    0    3    5    0   10    0    0    8    3
                         220        0640 0502044250 61776 1845   178    9   11  200   21  585    0    0    0    0    1
                         220        0640 0    0    0  3992   293   645    4   35    0    0    0    0    0    0    0    2
                         220             0    0    0     0     0     0    0    0    2    3   30   10    0    0    5    3
                         221        0640 0507044250 61776 1493   333   19   23  300   23  409    0    0    0    0    1
                         221        0640 0    0    0  1556   123   168    6   13    0    1    0    0    0    0    0    2
                         221             0    0    0     0     0     0    0    0    3    5   25   10    5    0    8    3
                         222        0640 0512044250 61776  460   108    6    7  121    7  145    0    0    0    0    1
                         222        0640 0    0    0  2170   130   635    2   23    0    0    0    0    0    0    0    2
                         222             0    0    0     0     0     0    0   30    5   10   35   15    0    0   45    3
                         223        0640 0517044250 61776 1673   172    9   10  191   29  573    0    0    0    0    1
                         223        0640 0    0    0  6483   408  1432    3   11    0    0    0    0    0    0    0    2
                         223             0    0    0     0     0     0    0   10    5   10   35   10    0    0   25    3
                         224        0640 0522044250 61776  167    25    1    1   23    3   56    0    0    0    0    1
                         224        0640 0    0    0   269    24    12    2    1    0    0    0    0    0    0    0    2
                         224             0    0    0     0     0     0    0    5    3    5   50   30    0    0   13    3
                         225        0640 0527044250 61776  453    68    3    3   75    6  106    0   10    1    0    1
                         225        0640 0    0    0  5713   564    48    6    1   30    0    0    0    0    0    0    2
                         225             0    0    0     0     0     0    0    0    3    5   30   40    0    0    3    3
                         226        0640 0532044250 61776  683    30    1    2   33    3  151    0   30    2    0    1
                         226        0640 0    0    0  4836   480    23    2    1    0    0    0    0    0    0    0    2
                         226             0    0    0     0     0     0    0   50    0    0    0   25    0    0   50    3
                         227        0640 0537044250 61776  573    23    1    1   26    2  142    0    0    0    0    1
                         227        0640 0    0    0  2391   287    10    1    0    0    0    0    0    0    0    0    2
                         227             0    0    0     0     0     0    0   65    5   10    0   15    0    0   80    3
                         244        0640 0497044200 61776 2151   159    8   10  176   26  732    0    0    0    0    1
                         244        0640 0    0    0  5395   359  1822   22   43    0    0    0    0    0    0    0    2
                         244             0497044200     0     0     0    0    0    0    0    0    5    0    0    0    3
                         245        0640 0502044200 61776 2037   523   26   34  583   24  692    0    0    0    0    1
                         245        0640 0    0    0 13220   839  4017  139   63    0    0    0    0    0    0    0    2
                         245             0    0    0     0     0     0    0    0    0    0    0   15    0    0    0    3
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    OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)         PAGE       8
PDS=CN1511.ESI.FHIL87.AQALLOC.PARMS                VOL=STOR02   OPT: LN/PG=51              THOLD=10
   ----------------------------------------------------------------------------------------------------------------------------

MEMBER NAME: DURL      (CONT)                       ALIASES: NONE

                  246       0640 0507044200 61776   779   111    6    7 124    5 247    0    0    0    0    1
                  246       0640 0    0    0  1555   120   543    3    9   0    0   0    0    0    0    0    2
                  246            0    0    0     0     0     0    0   10   5   10  60   13    0    0   25    3
                  247       0640 0512044200 61776   409    65    3    4  72    6 142    0    0   48   60    1
                  247       0640 0    0    0  2123   165   351    3   12   0    0   0    0    0    0    0    2
                  247            0    0    0     0     0     0    0    5   3    3  65   15    0    0    3    3
                  248       0640 0517044200 61776   303    35    2    2  39    3 104    0    0    0    0    1
                  248       0640 0    0    0  1514   119   267    3    5   0    0   0    0    0    0    0    2
                  248            0    0    0     0     0     0    0   10   5   10  40   30    0    0   15    3
                  249       0640 0522044200 61776   298    66    3    3  73    5  99    0    0    0    0    1
                  249       0640 0    0    0   373    29    39    4    2   0    0   0    0    0    0    0    2
                  249            0    0    0     0     0     0    0   10   5    5  55   20    0    0   15    3
                  250       0640 0527044200 61776   330    77    3    4  85    6 107    0    0    0    0    1
                  250       0640 0    0    0   472    38    47    4    3   0    0   0    0    0    0    0    2
                  250            0    0    0     0     0     0    0   15   5   10  20   15   15    0   20    3
                  251       0640 0532044200 61776   327    26    1    1  28    3 105    0    0    0    0    1
                  251       0640 0    0    0   308    27    18    2    2   0    0   0    0    0    0    0    2
                  251            0    0    0     0     0     0    0   30   0    0   0   20    0    0   80    3
                  252       0640 0537044200 61776   593    37    2    2  41    4 195    0    0    0    0    1
                  252       0640 0    0    0   385    37     2    1    1   0    1   0    0    0    0    0    2
                  252            0    0    0     0     0     0    0   60   0    5   5   10   20    0   60    3
                  253       0640 0542044200 61776   344    21    1    1  24    2 113    0    0    0    0    1
                  253       0640 0    0    0   223    21     1    1    1   0    0   0    0    0    0    0    2
                  253            0    0    0     0     0     0    0   10   0    5  20   10    0    0   10    3
                  270       0640 0497044150 61776    29     7    0    0   7    0  10    0    0    0    0    1
                  270       0640 0    0    0   146     9    40    0    1   0    0   0    0    0    0    0    2
                  270       0640 0    0    0     0     0     0    0    0   0    0   0    0    0    0    0    3
                  271       0640 0502044150 61776   907   182    9   12 202    6 275    0    0    0    0    1
                  271       0640 0    0    0  3098   185  1018    3   22   0    0   0    0    0    0    0    2
                  271       0640 0502044150     0     0     0    0    0   2    3  10   25    0    0    5    3
                  272       0640 0507044150 61776   974   137    7    9 153    5 323    0    0    0    0    1
                  272       0640 0    0    0  1152    91    71    6   16   0    0   0    0    0    0    0    2
                  272            0    0    0     0     0     0    0    0   2    3  65   20    0    0    5    3
                  273       0640 0512044150 61776   305    31    2    2  34    2  99    0    0    0    0    1
                  273       0640 0    0    0   955    63   269    5    5   0    0   0    0    0    0    0    2
                  273            0    0    0     0     0     0    0   10   2    3  60   20    0    0   15    3
                  274       0640 0517044150 61776   204    19    1    1  22    1  65    0    0    7    3    1
                  274       0640 0    0    0   435    30   108    3    3   0    0   0    0    0    0    0    2
                  274            0    0    0     0     0     0    0    5   2    0  65   20    0    0    7    3
                  275       0640 0522044150 61776   134    16    1    1  18    1  59    0    0    4    2    1
                  275       0640 0    0    0   194    14    31    2    2   0    0   0    0    0    0    0    2
                  275            0    0    0     0     0     0    0   50  10    0  10   20   10    0   60    3
                  276       0640 0527044150 61776   261    23    1    1  26    2  64    0    0    0    0    1
                  276       0640 0    0    0   233    18    34    2    2   0    0   0    0    0    0    0    2
                  276            0    0    0     0     0     0    0   70   5    5   0   10   10    0   80    3
                  277       0640 0532044150 61776   310    30    2    2  33    3  99    0    0    0    0    1
                  277       0640 0    0    0   303    25    26    2    2   0    0   0    0    0    0    0    2
                  277            0    0    0     0     0     0    0   50  20   10   0   10   10    0   80    3
                  278       0640 0537044150 61776   205    14    1    1  15    1  65    0    0    0    0    1
                  278       0640 0    0    0   157    15     4    1    1   0    0   0    0    0    0    0    2
                  278            0    0    0     0     0     0    0   60   5    5   0   10   10    0   70    3
```

```
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  15.49.34        DATE: 01/27/83 (83027)          PAGE       9
PDS=CN1511.ESI.FHIL87.AQALLOC.PARMS                VOL=STOR02   OPT: LN/PG=51                THOLD=10
   ------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: BURL      (CONT)                              ALIASES: NONE

                    279        0640 0542044150 61776  155    11    1    1   13    1   49    0    0    0    0    1
                    279        0640 0    0    0      135    12    3    1    1    0    0    0    0    0    0    0    2
                    279             0    0    0        0     0    0    0   80    5    5    0    0    0    0   90    3
                    298        0640 0502044100 61775   67     7    0    0    8    0   20    0    0    0    0    1
                    298        0640 0    0    0       93     0    1    1    1    0    0    0    0    0    0    2
                    298        0640 0    0    0        0     0    0    0    0    0    0    0    0    0    0    3
                    299        0640 0507044100 61775  565    63    3    4   69    3  165    0    0    0    0    1
                    299        0640 0    0    0      857    72   34    6   10    0    0    0    0    0    0    2
                    299             0507044100         0     0    0    0   30   10    5   20   10   15    0   45    3
                    300        0640 0512044100 61776  666    40    2    3   45    5  199    0    0    0    0    1
                    300        0640 0    0    0      929    63  219    4    7    0    1    0    0    0    0    0    2
                    300             0    0    0        0     0    0    0   40    5    5    5   10    5    0   50    3
                    301        0640 0517044100 61775  523    33    2    2   37    4  158    0    0    0    0    1
                    301        0640 0    0    0      692    47  157    4    5    0    1    0    0    0    0    0    2
                    301             0    0    0        0     0    0    0   30   20    5    0   10   20    0   55    3
                    302        0640 0522044100 61775  124     9    0    1   10    1   39    0    0    0    0    1
                    302        0640 0    0    0       94     7   14    1    1    0    0    0    0    0    0    2
                    302             0    0    0        0     0    0    0   30   40    5    0   10   10    0   75    3
                    303        0640 0527044100 61776  115     9    1    1   10    1   36    0    0    0    0    1
                    303        0640 0    0    0      101     8   12    1    1    0    0    0    0    0    0    2
                    303             0    0    0        0     0    0    0   50   10   10    0   10   15    0   70    3
                    304        0640 0532044100 61776   26     6    0    0    7    1    5    0    0    0    0    1
                    304        0640 0    0    0       81     8    3    0    0    0    0    0    0    0    0    2
                    304             0    0    0        0     0    0    0   60   10    5    0    5   20    0   75    3
                    305        0640 0537044100 61776   26     6    0    0    7    1    5    0    0    0    0    1
                    305        0640 0    0    0       81     8    3    0    0    0    0    0    0    0    0    2
                    305             0    0    0        0     0    0    0   70   10    5    0    5    5    0   85    3
                    306        0640 0542044100 61776   26     6    0    0    7    1    5    0    0    0    0    1
                    306        0640 0    0    0       81     8    3    0    0   40    0    0    0    0    0    2
                    306             0    0    0        0     0    0    0   50   10    5    0   20   10    0   65    3
                    326        0640 0507044050 61776  49[illegible]    55    3    3   61    2  145    0    0   34   35    1
                    326        0640 0    0    0      759    63   32    5    9    0    0    0    0    0    0    2
                    326             0507044050         0     0    0    0   30   20   10    0   20    5    0   60    3
                    327        0640 0512044050 61776  285    23    2    2   31    1   92    0    0    0    0    1
                    327        0640 0    0    0      789    50  239    5    4    0    0    0    0    0    0    2
                    327             0    0    0        0     0    0    0   60    5    0    0   10   25    0   65    3
                    328        0640 0517044050 61776  133    13    1    1   15    1   43    0    0    0    0    1
                    328        0640 0    0    0      270    17   80    2    1    0    0    0    0    0    0    2
                    328             0    0    0        0     0    0    0   60   10    0   10   10    5    0   70    3
                    329        0640 0522044050 61776   77     4    0    0    5    1   25    0    0    0    0    1
                    329        0640 0    0    0       12     1    0    0    0    0    0    0    0    0    0    2
                    329             0    0    0        0     0    0    0   50    5   10   20   10    0    0   65    3
                    330        0640 0527044050 61776   73 [illegible]  0    0    3    1   23    0    0    0    0    1
                    330        0640 0    0    0       11     1    0    0    0    0    0    0    0    0    0    2
                    330        0640 0    0    0        0     0    0    0   70    0   10    0   10   10    0   80    3
                    331        0640 0532044050 61776   52     5    0    0    6    1   14    0    0    0    0    1
                    331        0640 0    0    0       59     8    2    0    0   10    0    0    0    0    0    2
                    331        0640 0    0    0        0     0    0    0   75    5    5    0   10    0    0   85    3
                    332        0640 0537044050 61776   26     6    0    0    7    1    5    0    0    0    0    1
                    332        0640 0    0    0       81     8    3    0    0   40    0    0    0    0    0    2
                    332        0640 0    0    0        0     0    0    0   60    5   10    0   10   10    0   75    3
```

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OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME: 15.49.34         DATE: 01/27/83 (83027)          PAGE     10
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                    VOL=STOR02   OPT: LN/PG=51                 THOLD=10
---------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: EURL        (CONT)                             ALIASES: NONE

                      333       0640 0542044050 61776   26    6    0    0    7    1    5    0    0    0    0    1
                      333       0640 0    0    0   81    3    3    0    0    0    0    0    0    0    0    0    2
                      333       0640 0    0    0    0    0    0    0   50    5   10    0   10   25    0   65    3
                      334       0640 0547044050 61776   16    4    0    0    4    0    3    0    0    0    0    1
                      334       0640 0    0    0   48    5    2    0    0    0    0    0    0    0    0    0    2
                      334       0640 0    0    0    0    0    0    0   50    0    5    0    5    5    0   50    3
                      355       0640 0507044000 61776  229   25    1    2   28    1   67    0    0    0    0    1
                      355       0640 0    0    0  368   30   27    2    4    0    0    0    0    0    0    0    2
                      355       0640 0507044000     0    0    0    0   10   10    0    5   10    0    0   20    3
                      356       0640 0512044000 61776   89    9    0    1   10    1   29    0    0    0    0    1
                      356       0640 0    0    0  227   14   68    1    1    0    0    0    0    0    0    0    2
                      356       0640 0    0    0    0    0    0    0   10    0    0    0    0   15    0   10    3
                      357       0640 0517044000 61776   49    5    0    0    6    1   17    0    0    0    0    1
                      357       0640 0    0    0    9    1    0    0    0    0    0    0    0    0    0    0    2
                      357       0640 0    0    0    0    0    0    0   50    0    0    0   10    5    0   50    3
                      358       0640 0522044000 61776   61    7    0    0    7    1   21    0    0    0    0    1
                      358       0640 0    0    0   11    1    0    0    0    0    0    0    0    0    0    0    2
                      358       0640 0    0    0    0    0    0    0   65    0    0    0   10   25    0   65    3
                      359       0640 0527044000 61776   73    5    0    0    6    1   24    0    0    0    0    1
                      359       0640 0    0    0   12    1    0    0    0   30    0    0    0    0    0    0    2
                      359       0640 0    0    0    0    0    0    0   50    0    0    0   10   40    0   50    3
                      360       0640 0532044000 61776   70    3    0    0    4    1   21    0    0    0    0    1
                      360       0640 0    0    0   26    2    1    0    0   30    0    0    0    0    0    0    2
                      360       0640 0    0    0    0    0    0    0   60    0    0    0   10   30    0   60    3
                      361       0640 0537044000 61776   37    4    0    0    5    1   10    0    0    0    0    1
                      361       0640 0    0    0   55    5    2    0    0    0    0    0    0    0    0    0    2
                      361       0640 0    0    0    0    0    0    0   50    0    0    0   20   30    0   50    3
                      362       0640 0542044000 61776   17    4    0    0    4    0    4    0    0    0    0    1
                      362       0640 0    0    0   53    5    2    0    0    0    0    0    0    0    0    0    2
                      362       0640 0    0    0    0    0    0    0   75    0    0    0    5   20    0   75    3
                      363       0640 0547044000 61776   20    4    0    0    4    1    5    0    0    0    0    1
                      363       0640 0    0    0   58    5    4    0    0    0    0    0    0    0    0    0    2
                      363       0640 0547044000     0    0    0    0   90    0    5    0    0    5    0   95    3
                      386       0640 0517043950 61776   15    2    0    0    2    0    5    0    0    0    0    1
                      386       0640 0    0    0    3    0    0    0    0    0    1    0    0    0    0    0    2
                      386       0640 0517043950     0    0    0    0    5    0    0    0    0    0    0    5    3
                      387       0640 0522043950 61776   33    4    0    0    4    1   13    0    0    0    0    1
                      387       0640 0    0    0   11    1    0    0    0   30    1    0    0    0    0    0    2
                      387       0640 0    0    0    0    0    0    0   30   10   10    0   10    0    0   50    3
                      388       0640 0527043950 61776   44    4    0    0    4    1   15    0    0    0    0    1
                      388       0640 0    0    0   23    2    0    0    0    0    0    0    0    0    0    0    2
                      388       0640 0    0    0    0    0    0    0   75   10   10    0    5    0    0   95    3
                      389       0640 0532043950 61776   18    0    0    0    0    1    6    0    0    0    0    1
                      389       0640 0    0    0   18    2    0    0    0    0    0    0    0    0    0    0    2
                      389       0640 0    0    0    0    0    0    0   60    0    0    0   20   20    0   60    3
                      390       0640 0537043950 61776    7    0    0    0    0    1    2    0    0    0    0    1
                      390       0640 0    0    0   21    2    0    0    0    0    0    0    0    0    0    0    2
                      390       0640 0    0    0    0    0    0    0   50   10    0    0   20   20    0   60    3
                      391       0640 0542043950 61776    8    0    0    0    0    1    3    0    0    0    0    1
                      391       0640 0    0    0   19    1    4    0    0    0    0    0    0    0    0    0    2
                      391       0640 0    0    0    0    0    0    0   60   10   10    0   10   10    0   80    3
```

```
MEMBER NAME: BURL      (CONT)                                                                                        
                                       ALIASES: NONE
          392      0640 0547043950 61776    13     0     0     0     0     1     6     0     0     0     0     1
          392      0640 0   0    0    24     1     9     0     0     0     0     0     0     0     0     0     2
          392      0640 0   0    0     0     0     0     0    60    10    10     0    10    10     0    80     3
          410      0640 0527043900 61776     5     0     0     0     0     0     2     0     0     0     0     1
          410      0640 0   0    0    15     1     0     0     0     0     0     0     0     0     0     0     2
          410      0640 0527043900     0     0     0     0    40    10     5     0     5     0     0    55     3
          411      0640 0532043900 61776     7     0     0     0     0     1     2     0     0     0     0     1
          411      0640 0   0    0    21     2     0     0     0     0     0     0     0     0     0     0     2
          411      0640 0   0    0     0     0     0     0     0     0     0     0     0     0     0     0     2
          411           0   0    0     0     0     0     0    70     5    10     0     0    10     0    85     3
          412      0640 0537043900 61776     6     0     0     0     0     1     2     0     0     0     0     1
          412      0640 0   0    0    19     2     0     0     0     0     0     0     0     0     0     0     2
          412           0   0    0     0     0     0     0    55     5    10     0     5    25     0    70     3
          413      0640 0542043900 61776    12     0     0     0     0     1     5     0     0     0     0     1
          413      0640 0   0    0    20     1     9     0     0     0     0     0     0     0     0     0     2
          413           0   0    0     0     0     0     0    55     5    10     0    10    20     0    70     3
          414      0640 0547043900 61776    15     0     0     0     0     1     6     0     0     0     0     1
          414      0640 0   0    0    25     1    11     0     0     0     0     0     0     0     0     0     2
          414           0   0    0     0     0     0     0    85     5    10     0     0     0     0   100     3
          432      0640 0527043850 61776     4     0     0     0     0     0     1     0     0     0     0     1
          432      0640 0   0    0    13     1     0     0     0     0     0     0     0     0     0     0     2
          432           0527043850     0     0     0     0    40     5     0     0     0     5     0    45     3
          433      0640 0532043850 61776     6     0     0     0     0     0     2     0     0     0     0     1
          433      0640 0   0    0    17     2     0     0     0     0     0     0     0     0     0     0     2
          433           0   0    0     0     0     0     0    70     0     0     0    10    10     0    70     3
          434      0640 0537043850 61776     8     0     0     0     0     1     3     0     0     0     0     1
          434      0640 0   0    0    20     2     2     0     0     0     1     0     0     0     0     0     2
          434           0   0    0     0     0     0     0    75     5     5     0     0    15     0    85     3
          435      0640 0542043850 61775    13     0     0     0     0     1     6     0     0     0     0     1
          435      0640 0   0    0    24     1     9     0     0     0     1     0     0     0     0     0     2
          435           0   0    0     0     0     0     0    65     5    10     0     0    20     0    80     3
          436      0640 0547043850 61776    15     0     0     0     0     1     6     0     0     0     0     1
          436      0640 0   0    0    25     1    11     0     0     0     0     0     0     0     0     0     2
          436           0   0    0     0     0     0     0    70    10     5     0     0    10     0    85     3
          453      0640 0537043800 61776     4     0     0     0     0     0     1     0     0     0     0     1
          453      0640 0   0    0    16     1     0     0     0     0     0     0     0     0     0     0     2
          433           0537043800     0     0     0     0    40     0     0     0     5    20     0    40     3
          454      0640 0542043800 61776    12     0     0     0     0     1     5     0     0     0     0     1
          454      0640 0   0    0    23     2     7     0     0     0     1     0     0     0     0     0     2
          454           0   0    0     0     0     0     0    30     0     0     0     0    55     0    30     3
          455      0640 0547043800 61776    15     0     0     0     0     1     6     0     0     0     0     1
          455      0640 0   0    0    25     1    11     0     0     0     0     0     0     0     0     0     2
          455           0   0    0     0     0     0     0    40     5    10     0     0    40     0    40     3
 ***** END OF MEMBER 'BURL' *****                                                      298 LINE(S) IN THIS MEMBER
```

```
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (830[illegible]         PAGE      12
PDS=CM1511.ESI.PHIL87.AQALLOC.PARMS                 VOL=STOR02   OPT: LN/PG=51               THOLD=10
   ----------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: CAMD                                                                                                    --------------
                                           ALIASES: NONE
                  218        0740 0492044250 61776   102    59    3    4   65    6   35    9    0    0    0    1
                  218        0740 0   0    0  3723   190  1565    0   25   20    1    0    0    0    0    0    2
                  218        0740 0452044250     0     0     0    0    0    0    0    0    5    0    0    0    3
                  219        0740 0497044250 61776    19    46    2    3   51    3    6    9    0    0    0    1
                  219        0740 0   0    0  3293   151  1490    1   29    0    1    0    0    0    0    0    2
                  219        0740 0   0    0     0     0     0    0    0    0    0    0    5    0    0    0    3
                  242        0740 0487044200 61776  3164   307   21   23  340    831041   18    0    0    0    1
                  242        0740 0   0    0 32504  193912524    2   53   20    1    0    0    0    0    0    2
                  242        0740 0487044200     0     0     0    0    0    0    0    0    5    0    0    0    3
                  243        0740 0492044200 61776  5783   380   21   24  419   1012070    4    0    0    0    1
                  243        0740 0   0    0 22039  1414  6111   14  167   60    1    0    0    0    0    0    2
                  243        0740 0   0    0     0     0     0    0    0    0    0    0    5    0    0    0    3
                  244        0740 0497044200 61775  1120   258   13   15  256   19  350    0    0    0    0    1
                  244        0740 0   0    0  9994   718  2015   13   78   10    0    0    0    0    0    0    2
                  244        0740 0   0    0     0     0     0    0    0    0    0    0   10    0    0    0    3
                  245        0740 0502044200 61775     0     0    0    0    0    0    0    0    0    0    0    1
                  245        0740 0   0    0     0     0     0    0    0    0    0    0    0    0    0    0    2
                  245        0740 0   0    0     0     0     0    0    0    0    0    0    0    0    0    0    3
                  268        0740 0487044150 61776  4274   529   30   37  537    921546   15    0    0    0    1
                  268        0740 0   0    0 14616   860  5524    1   39   20    1    0    0    0    0    0    2
                  268        0740 0487044150     0     0     0    0    0    0    0    0    0    0    0    0    3
                  269        0740 0492044150 61776  6079   575   29   37  632   1222361    0    0    0    0    1
                  269        0740 0   0    0 22222  1730  3547  117  111   20    1    0    0    0    0    0    2
                  269        0740 0   0    0     0     0     0    0    0    0    0    0    5    0    0    0    3
                  270        0740 0497044150 61776  3376   496   26   32  555    561097    0    0    0    0    1
                  270        0740 0   0    0 16159  1350  1438   13  114    0    0    0    0    0    0    0    2
                  270        0740 0   0    0     0     0     0    0    0    5    0    0   10    0    0    5    3
                  271        0740 0502044150 61776   869   120    6    8  135    9  237    0    0    0    0    1
                  271        0740 0   0    0  4254   230  1658    4   28    0    0    0    0    0    0    0    2
                  271        0740 0   0    0     0     0     0    0    0    5    0    5   10    0    0    5    3
                  295        0740 0487044100 61776  1635   364   20   24  406   30  555    4    0    0    0    1
                  295        0740 0   0    0  2961   177   918    1   21    0    0    0    0    0    0    0    2
                  295        0740 0487044100     0     0     0    0    0    0    0    0    5    0    0    0    3
                  296        0740 0492044100 61776  5356   768   44   51  862    991840    0    0    0    0    1
                  296        0740 0   0    0 11048   759  2758   16   57   20    0    0    0    0    0    0    2
                  296        0740 0   0    0     0     0     0    0    0    0    0    0    0    0    0    0    3
                  297        0740 0497044100 61776  2972   306   17   19  344   48  298    0    0    0    0    1
                  297        0740 0   0    0  6727   516   854   20   63   15    0    0    0    0    0    0    2
                  297        0740 0   0    0     0     0     0    0    0    5    0    5    5    0    0    5    3
                  298        0740 0502044100 61776  1715    67    3    4   74   12  463    0    0    0    0    1
                  298        0740 0   0    0  2174   172   222    0   22    0    0    0    0    0    0    0    2
                  299        0740 0   0    0     0     0     0    0   30   15   15   10   10    0    0   60    3
                  299        0740 0507044100 61776     0     0    0    0    0    0    0    0    0    0    0    1
                  299        0740 0   0    0     0     0     0    0    0    0    0    0    0    0    0    0    2
                  299        0740 0   0    0     0     0     0    0    0    0    0    0    0    0    0    0    3
                  323        0740 0492044050 61776  2362   215   12   15  240   23  343    0    0    0    0    1
                  323        0740 0   0    0  3661   233   766    1   31    0    0    0    0    0    0    0    2
                  323        0740 0492044050     0     0     0    6    0    5    5    5   30    0    0   10    3
                  324        0740 0497044350 61776  4767   227   12   15  254    571373    0    0    0    0    1
                  324        0740 0   0    0  6184   533   356   12   42   20    1    0    0    0    0    0    2
                  324        0740 0   0    0     0     0     0    0    0    0    5   10   10    0    0    5    3
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)        PAGE     13
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                VOL=STOR02   OPT: LN/PG=51                THOLD=10
   ---------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: CAMD      (CONT)                        ALIASES: NONE

  325      0740 0502044050  61776  1820   105   6   7 118  18 567    0    0    0    0    1
  325      0740 0    0   0   3034   238   387   3  23  20   1   0    0    0    0    0    2
  325      0740 0    0   0      0     0     0   0  20  10  10   5   15    0    0   40    3
  326      0740 0507044050  61776   180     9   1   1  10   1  54    0    0    0    0    1
  326      0740 0    0   0    266    22    15   0   3   0   0   0    0    0    0    0    2
  326      0740 0    0   0      0     0     0   0  10   0   5   0    5    0    0   15    3
  352      0740 0492044000  61776   671    70   4   5  77  10 166    0    0    0    0    1
  352      0740 0    0   0   2532   240    67   1   6   0   0   0    0    0    0    0    2
  352      0740 0492044000      0     0     0   0  30  30  15  10    5    0    0   75    3
  353      0740 0497044000  61776  1227   120   7   8 134  10 390    0    0    0    0    1
  353      0740 0    0   0   2895   234   252   3  29   0   1   0    0    0    0    0    2
  353      0740 0    0   0      0     0     0   0  45  10   5  10   20    0    0   60    3
  354      0740 0502044000  61776  1164   121   6   7 134  12 367    0    0   21   10    1
  354      0740 0    0   0   3109   188  1054   4  15  50   1   0    0    0    0    0    2
  354      0740 0    0   0      0     0     0   0  30   5   5  10   20    5    0   40    3
  355      0740 0507044000  61776   689   112   6   7 125  10 215    0    0    0    0    1
  355      0740 0    0   0   1775   101   282   9  46  50   0   0    0    0    0    0    2
  355      0740 0    0   0      0     0     0   0  40  10   0  10   10    5    0   50    3
  356      0740 0512044000  61776    44     3   0   0   3   1  14    0    0    0    0    1
  356      0740 0    0   0     22     2     4   0   0   0   0   0    0    0    0    0    2
  356      0740 0512044000      0     0     0   0  40   5   0  10   10   15    0   45    3
  357      0740 0517044000  61776    15     1   0   0   1   0   5    0    0    0    0    1
  357      0740 0    0   0      7     1     1   0   0   0   0   0    0    0    0    0    2
  357      0740 0    0   0      0     0     0   0   5   5   0   0    5    5    0   70    3
  382      0740 0497043950  61776   436    68   4   5  77   4 143    0    0    0    0    1
  382      0740 0    0   0   1367    78   364   1  21   0   0   0    0    0    0    0    2
  382      0740 0497043950      0     0     0   0  20   5   0  15    5    0    0   25    3
  383      0740 0502043950  61775   313    32   2   2  36   2 103    0    0    0    0    1
  383      0740 0    0   0    659    29   328   2   3  10   0   0    0    0    0    0    2
  383      0740 0    0   0      0     0     0   0  30  10   5  10    5   10    0   40    3
  384      0740 0507043953  61776   385    49   3   3  55  10 119    0    0    0    0    1
  384      0740 0    0   0    460    31   128   1   1  40   0   0    0    0    0    0    2
  384      0740 0    0   0      0     0     0   0  30   5   0  15    5    0    0   35    3
  385      0740 0512043950  61776   110     8   0   0   9   2  36    0    0    0    0    1
  385      0740 0    0   0     89     6    20   0   0  20   0   0    0    0    0    0    2
  385      0740 0    0   0      0     0     0   0  30  10  10  25    5   10    0   40    3
  386      0740 0517043950  61775    73     5   0   0   6   2  24    0    0    0    0    1
  386      0740 0    0   0     33     3     7   0   0  30   0   0    0    0    0    0    2
  386      0740 0    0   0      0     0     0   0  50   5   5  10    5   25    0   55    3
  387      0740 0522043950  61776     0     0   0   0   0   0   0    0    0    0    0    1
  387      0740 0    0   0      0     0     0   0   0   0   0   0    0    0    0    0    2
  387      0740 0    0   0      0     0     0   0   0   0   0   0    0  100    0    0    3
  406      0740 0497043900  61776    26     3   0   0   3   0   9    0    0    0    0    1
  406      0740 0    0   0     56     2    30   0   0   0   0   0    0    0    0    0    2
  406      0740 0    0   0      0     0     0   0   0   0   0   0    0    0    0    0    3
  407      0740 0502043900  61776   156    17   1   1  19   1  52    0    0    0    0    1
  407      0740 0    0   0    334    13   181   1   2   0   0   0    0    0    0    0    2
  407      0740 0502043900      0     0     0   0  10  16   0   0    5    5    0   10    3
  408      0740 0507043900  61776   465   126   6   8 141   6 118    0    0    0    0    1
  408      0740 0    0   0    622    30   267   1   3  30   0   0    0    0    0    0    2
  408      0740 0    0   0      0     0     0   0  20   5   5  25   15   20    0   30    3
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    OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83.027)        PAGE     14
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                  VOL=STOR02   OPT: LN/PG=51              THOLD=10
   ------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: CAMD     (CONT)                         ALIASES: NONE
                              409       0740 0512043900 61776  329    79    4    5   88    5   83    0    0    0    0    1
                              409       0740 0    0     0  382    27    98    1    1   60    0    0    0    0    0    0    2
                              409       0740 0    0     0    0     0     0    0   30   15   10   25   10    0    0   55    3
                              430       0740 0507043850 61776  234    26    1    2   29    1   77    0    0    0    0    1
                              430       0740 0    0     0  501    19   272    1    3   30    0    0    0    0    0    0    2
                              430       0740 0507043850     0     0     0    0   25    5    5   15    5   10    0   35    3
                              431       0740 0512043850 61776  168    17    1    1   19    1   55    0    0    0    0    1
                              431       0740 0    0     0  352    16   170    1    2   20    0    0    0    0    0    0    2
                              431       0740 0    0     0    0     0     0    0   20   10    0   10    5    0    0   30    3
                              452       0740 0507043800 61776   26     3    0    0    3    0    9    0    0    0    0    1
                              452       0740 0    0     0   56     2    30    0    0    5    0    0    0    0    0    0    2
                              452            0507043800     0     0     0    0    5    0    0    0    0    0    0    5    3
        ***** END OF MEMBER 'CAMD' *****                                                     114 LINE(S) IN THIS MEMBER
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34          DATE: 01/27/83 (83027)          PAGE     15
   PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                  VOL=STORC2   OPT: LN/PG=51              THOLD=10
   ------------------------------------------------------------------------------------------------------------------------------
   MEMBER NAME: CHEST                                     ALIASES: NONE
                        88       1660 0437044500 61776   214     6    1    1    7    9   77    0    0    0    0    1
                        88       1660 0    0   0   113     6    12    0    4    0    1    0    0    0    0    0    2
                        88       1660 0437044500     0     0     0    0    5   25   40    0   30    0    0    0    3
                        89       1660 0442044500 61776   594    70    5    6   80   26  216    0    0    0    0    1
                        89       1660 0    0   0   832    68    94   11    9    0    1    0    0    0    0    0    2
                        89       1660 0442044500     0     0     0    0    0    5   10   25   45    0   25    0    3
                        90       1660 0447044500 61776   170    17    1    1   19    7   56    0    0    0    0    1
                        90       1660 0    0   0   237    14    74    3    1    0    1    0    0    0    0    0    2
                        90       1660 0447044500     0     0     0    0    0    3    5   25   20    0   25    0    3
                        91       1660 0452044500 61776    49     4    0    0    4    5    0    0    0    0    0    1
                        91       1660 0    0   0     0     0     0    0    0    0    0    0    0    0    0    0    2
                        91            0452044500     0     0     0    0    0    0    0    0    1    0    0    0    3
                       109       1660 0427044450 61776    62    22    1    1   24   14   20    0    0    0    0    1
                       109       1660 0    0   0   944    12   766    0    4    0    0    0    0    0    0    0    2
                       109       1660 0427044450     0     0     0    0    5   30   50    0   10    0    0    0    3
                       110       1660 0432044450 61776    72     6    0    0    7    7   24    0    0    0    0    1
                       110       1660 0    0   0    60     3    17    0    1    0    0    0    0    0    0    0    2
                       110       1660 0    0   0     0     0     0    0    5   25   40   10   20    0   10    0    3
                       111       1660 0437044450 61776    92    23    1    1   26   11   31    0    0    0    0    1
                       111       1660 0    0   0   139    10    15    3    2    0    0    0    0    0    0    0    2
                       111       1660 0    0   0     0     0     0    0    2   20   35   15   25    0   15    0    3
                       112       1660 0442044450 61776   202    37    2    2   41   15   68    0    0    0    0    1
                       112       1660 0    0   0   656    54    47   21    3    0    0    0    0    0    0    0    2
                       112       1660 0    0   0     0     0     0    0    0   10   10   45   30    0   45    0    3
                       113       1660 0447044450 61776   253    19    1    1   21   12   86    0    0    0    0    1
                       113       1660 0    0   0  1114    96    78   39    3    0    0    0    0    0    0    0    2
                       113       1660 0    0   0     0     0     0    0    0    0    5   60   30    0   60    0    3
                       114       1660 0452044450 61776   620    57    3    3   62   33  188    0    0    0    0    1
                       114       1660 0    0   0  4675   213  2414   44    7    0    1    0    0    0    0    0    2
                       114       1660 0    0   0     0     0     0    0    0    0    3    5   15    0    5    0    3
                       115       1660 0457044450 61776     0     0    0    0    0    0    0    0    0    0    0    1
                       115       1660 0    0   0     0     0     0    0    0    0    0    0    0    0    0    0    2
                       115       1660 0457044450     0     0     0    0    0    0    0    0    1    0    0    0    3
                       131       1660 0422044400 61776    84     8    0    0    9    4   25    0    0    0    0    1
                       131       1660 0    0   0    91     5    15    2    2    0    0    0    0    0    0    0    2
                       131       1660 0422044400     0     0     0    0    0   25   40   15   20    0   15    5    3
                       132       1660 0427044400 61776    94    73    5    5   83   14   26    0    0    0    0    1
                       132       1660 0    0   0   446     8   334    2    2    0    0    0    0    0    0    0    2
                       132       1660 0    0   0     0     0     0    0    0   20   30   15   30    0   15   16    3
                       133       1660 0432044400 61776    57    13    1    1   20    8   13    0    0    0    0    1
                       133       1660 0    0   0    29     2     3    0    1    0    0    0    0    0    0    0    2
                       133       1660 0    0   0     0     0     0    0    2   15   25   30   25    0   30    0    3
                       134       1660 0437044400 61776    69    15    1    1   17    9   23    0    0    0    0    1
                       134       1660 0    0   0    30     2     7    0    1    0    0    0    0    0    0    0    2
                       134       1660 0    0   0     0     0     0    0    2   10   20   10   50    0   10    0    3
                       135       1660 0442044400 61776    99    13    1    1   15    8   32    0    0    0    0    1
                       135       1660 0    0   0   135    10    17    4    1    0    0    0    0    0    0    0    2
                       135       1660 0    0   0     0     0     0    0    0   10   20   40   20    0   40    0    3
                       136       1660 0447044400 61776   208    15    1    1   17   11   66    0    0    0    0    1
                       136       1660 0    0   0   513    42    51   20    5    0    0    0    0    0    0    0    2
                       136       1660 0    0   0     0     0     0    0    0    5   10   60   20    0   60    0    3
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    OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)        PAGE     16
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                 VOL=STOR02   OPT: LN/PG=51              THOLD=10
  ---------------------------------------------------------------------------------------------------------------------
MEMBER NAME: CHEST    (CONT)                              ALIASES: NONE

   137      1660 0452044400 61776  1334   120     8     8   133    88   639     0     0     0     0     1
   137      1660 0   0    0 10066   518  4609    21    21     0     1     0     0     0     0     0     2
   137      1660 0   0    0     0     0     0     0     0     2     3    35    20     0    35     0     3
   138      1660 0457044400 61776   146    15     1     1    17     5    46     0     0     0     0     1
   138      1660 0   0    0   439    19   290     1     1     0     1     0     0     0     0     0     2
   138      1660 0457044400     0     0     0     0     0     1     1     3    20     0     0     0     3
   154      1660 0417044350 61776    88     9     0     0    10     6    28     0     0     0     0     1
   154      1660 0   0    0   154    11    19     2     2     0     0     0     0     0     0     0     2
   154      1660 0417044350     0     0     0     0     0     0     0    40     5     0     0     0     3
   155      1660 0422044350 61776   206    27     1     1    30    18    67     0     0     0     0     1
   155      1660 0   0    0   436    36    50     4     3     0     0     0     0     0     0     0     2
   155      1660 0   0    0     0     0     0     0     0     5    10    60    20     0     0    10     3
   156      1660 0427044350 61776   161    55     3     4    62    13    47     0     0     0     0     1
   156      1660 0   0    0   176    12    11     3     3     0     0     0     0     0     0     0     2
   156      1660 0   0    0     0     0     0     0     0    15    30    30    20     0     0     5     3
   157      1660 0432044350 61776   129    11     1     1    12    13    36     0     0     0     0     1
   157      1660 0   0    0   109     7     3     2     3     0     0     0     0     0     0     0     2
   157      1660 0   0    0     0     0     0     0     2    10    25    10    50     0     0     0     3
   158      1660 0437044350 61776   126    96     6     7   108    13    39     0     0     0     0     1
   158      1660 0   0    0   165    12    32     0     0     0     0     0     0     0     0     0     2
   158      1660 0   0    0     0     0     0     0     0     5    10    50    30     0     0     0     3
   159      1660 0442044350 61776   231    46     2     3    51    14    72     0     0     0     0     1
   159      1660 0   0    0   277    19    49    14     1     0     0     0     0     0     0     0     2
   159      1660 0   0    0     0     0     0     0     0     5    10    65    20     0     0     0     3
   160      1660 0447044350 61776   208   103     6     7   116    16    67     0     0     0     0     1
   160      1660 0   0    0   372    20    87    23     5     0     0     0     0     0     0     0     2
   160      1660 0   0    0     0     0     0     0     0     5    10    65    20     0     0     0     3
   161      1660 0452044350 61776   269   159     9    11   179    14    83     0     0     0     0     1
   161      1660 0   0    0  1545    65   798     4     7     0     0     0     0     0     0     0     2
   161      1660 0   0    0     0     0     0     0     0    15    20    50    15     0     0     0     3
   162      1660 0457044350 61776   336    65     3     4    73    15   117     0     0     0     0     1
   162      1660 0   0    0  1596    56  1004     6     2     0     1     0     0     0     0     0     2
   162      1660 0   0    0     0     0     0     0     5    20    30    30    13     1     0     0     3
   163      1660 0462044350 61776   421   224    11    14   250    16   145     0     0     0     0     1
   163      1660 0   0    0  1302    85   441     0     0    30     1     0     0     0     0     0     2
   163      1660 0   0    0     0     0     0     0     0     1     2     5    15     0     0    10     3
   164      1660 0467044350 61776    47     3     0     0     3     1    15     0     0     0     0     1
   164      1660 0   0    0    59     4     2     5     1     0     0     0     0     0     0     0     2
   164      1660 0467044350     0     0     0     0     0    35    50     0     0     0     0     0     3
   178      1660 0417044300 61776    43     2     0     0     3     2    13     0     0     0     0     1
   178      1660 0   0    0    23     2     2     0     1     0     0     0     0     0     0     0     2
   178      1660 0417044300     0     0     0     0     0    20    25     0     6     0     0     0     3
   179      1660 0422044300 61776   150     8     0     0     9     7    46     0     0     0     0     1
   179      1660 0   0    0    88     6     4     0     2     0     0     0     0     0     0     0     2
   179      1660 0   0    0     0     0     0     0     0    30    45    10    15     0     0     0     3
   180      1660 0427044300 61776   178    25     1     1    28     9    57     0     0     0     0     1
   180      1660 0   0    0   236    17     5     2     5     0     0     0     0     0     0     0     2
   180      1660 0   0    0     0     0     0     0     0    20    30    30    13     0     0    16     3
   181      1660 0432044300 61776   237    20     1     1    22    12    72     0     0     0     0     1
   181      1660 0   0    0   264    19    19     4     4     0     0     0     0     0     0     0     2
   181      1660 0   0    0     0     0     0     0     0     3     5    50    40     0     0     0     3
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)        PAGE      17
PDS=CN1511.ESI.PHILS7.AQALLOC.PARMS                  VOL=STOR02   OPT: LN/PG=51              THOLD=10
   ------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: CHEST    (CONT)                        ALIASES: NONE
                                132        1660 0437044300 61776  350    51    3    3  56   15 104    0    0    0    0    1
                                182        1660 0    0    0   788    44   285    2    5   0    0   0    0    0    0    0    2
                                132        1660 0    0    0     0     0     0    0    0  20   30  10   35    0    0    0    3
                                183        1660 0442044300 61776  619    84    5    5  94   19 135    0    0    0    0    1
                                183        1660 0    0    0  1470    84   530    1    8  10    0   0    0    0    0    0    2
                                183             0    0    0     0     0     0    0    0  10   20  30   25    0    0    0    3
                                184        1660 0447044300 61776  698   184   10   13 207   28 202    0    0    0    0    1
                                184        1660 0    0    0  3668   169  1753    7   21  90    1   0    0    0    0    0    2
                                184             0    0    0     0     0     0    0    0  15   25   5   40    0    0   10    3
                                185        1660 0452044300 61776  900   123    7    8 137   39 268    0    0    0    0    1
                                185        1660 0    0    0  4478   224  1954   18   25  90    1   0    0    0    0    0    2
                                185             0    0    0     0     0     0    0    0  15   20  15   30    0    0   10    3
                                186        1660 0457044300 61776 1433   200   10   12 223   62 471    0    0    0    0    1
                                186        1660 0    0    0  9211   687  1694   57   54  60    1   0    0    0    0    0    2
                                186             0    0    0     0     0     0    0    0  15   30   5   20    0    0   10    3
                                187        1660 0462044300 61776 1336    97    5    5 108   32 422    0    0    0    0    1
                                187        1660 0    0    0  4013   328   174  148   39  10    0   0    0    0    0    0    2
                                187             0    0    0     0     0     0    0    0  15   25   0   10    0    0    5    3
                                188        1660 0467044300 61776   93     5    0    0   6    2  31    0    0    0    0    1
                                188        1660 0    0    0   118     8     4   11    2   0    0   0    0    0    0    0    2
                                188             0467044300     0     0     0    0    0   1    1   0    5    0    0    0    3
                                203        1660 0417044250 61776  152    37    2    3  42   14  51    0    0    0    0    1
                                203        1660 0    0    0   314     9   193    0    2   0    0   0    0    0    0    0    2
                                203             0417044250     0     0     0    0    5  20   30   0   30    0    0    0    3
                                204        1660 0422044250 61776  290    36    2    2  41   14  97    0   19  315  355    1
                                204        1660 0    0    0   863    36   313    7   16   0    1   0    0    0    0    0    2
                                204             0    0    0     0     0     0    0    0  10   20  10   55    0    0    0    3
                                205        1660 0427044250 61776 1770   138    9    9 154   90 624    0    2   35   30    1
                                205        1660 0    0    0 11681   548  5694   16   42  90    1   0    0    0    0    0    2
                                205        1660 0    0    0     0     0     0    0    0  10   20  20   30    0    0   10    3
                                206        1660 0432044250 61776  641   109    6    7 121   33 188    0    1   22    2    1
                                206        1660 0    0    0  2178   125   263    1    5  90    1   0    0    0    0    0    2
                                206        1660 0    0    0     0     0     0    0    0  10   20  20   35    0    0   10    3
                                207        1660 0437044250 61776 1110   140    8    8 156   46 335    0    1   22    2    1
                                207        1660 0    0    0  8409   304  4727    6   60  90    1   0    0    0    0    0    2
                                207        1660 0    0    0     0     0     0    0    5  20   30  25   10    0    0   10    3
                                208        1660 0442044250 61776  507    76    4    7  35   19 148    0    0    0    0    1
                                208        1660 0    0    0  1240    72   435    7    7  90    1   0    0    0    0    0    2
                                208        1660 0    0    0     0     0     0    0    0  20   30  10   30    0    0   10    3
                                209        1660 0447044250 61776  933    91    5    6 102   26 283    0    0   63   26    1
                                209        1660 0    0    0  1986   132   486   40   12   0    1   0    0    0    0    0    2
                                209        1660 0    0    0     0     0     0    0    0   5   15  20   30    0    0    0    3
                                210        1660 0452044250 61776  644    44    2    3  50   16 232    0    0    0    0    1
                                210        1660 0    0    0   590    49    31   10    5   0    1   0    0    0    0    0    2
                                210        1660 0    0    0     0     0     0    0    0   5   15  40   30    0    0    0    3
                                211        1660 0457044250 61776  239    62    3    4  69   14  68    0    0    0    0    1
                                211        1660 0    0    0   233    16     1    5    6   0    0   0    0    0    0    0    2
                                211        1660 0    0    0     0     0     0    0    0  15   25  35   25    0    0    0    3
                                212        1660 0462044250 61776   95    15    1    1  17    4  26    0    0    0    0    1
                                212        1660 0    0    0    83     5     0    1    3   0    0   0    0    0    0    0    2
                                212             0462044250     0     0     0    0    0   3    5   0    2    0    0    0    3
```

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    OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)        PAGE     18
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS              VOL=STOR02   OPT: LN/PG=51                THOLD=10
 ---------------------------------------------------------------------------------------------------------------------------

MEMBER NAME: CHEST     (CONT)                    ALIASES: NONE

        223      1660 0417044200 61776  435   61    3    4   68   41 150    0   10    1    0    1
        228      1660 0    0    0   935   46  409    1    9   30    1   0    0    0    0    0    2
        228           0417044200     0    0    0    0    0   10   15  30   40    0    0   10    3
        229      1660 0422044200 61776  316   37    2    2   41   19 108    0    0    0    0    1
        229      1660 0    0    0   815   37  333    5    9   80    1   0    0    0    0    0    2
        229           0    0    0     0    0    0    0    0   15   20  30   35    0    0   10    3
        230      1660 0427044200 61776  389   28    2    2   31   36 124    0    0    0    0    1
        230      1660 0    0    0   706   35  289    4    5   20    1   0    0    0    0    0    2
        230           0    0    0     0    0    0    0    0   10   15  30   45    0    0    5    3
        231      1660 0432044200 61776  221    9    1    1   10   11  68    0    0   10    1    1
        231      1660 0    0    0   150    9   13   11    3   40    1   0    0    0    0    0    2
        231           0    0    0     0    0    0    0    0   10   15  20   50    0    0    5    3
        232      1660 0437044200 61776  169   13    1    1   15   23  53    0    0    0    0    1
        232      1660 0    0    0   839   78   13    8    3   20    1   0    0    0    0    0    2
        232           0    0    0     0    0    0    0    0    5   10  25   50    0    0    0    3
        233      1660 0442044200 61776  233   18    1    1   21   10  72    0    0    0    0    1
        233      1660 0    0    0   331   26   40    4    2    0    0   0    0    0    0    0    2
        233           0    0    0     0    0    0    0    0    0    0  45   50    0    0    0    3
        234      1660 0447044200 61776 3161  199    9   13  220   94 946    0    0    0    0    1
        234      1660 0    0    0 15591 1040 4366   29   75   30    0   0    0    0    0    0    2
        234           0    0    0     0    0    0    0    0    5   10  15   35    0    0    0    3
        235      1660 0452044200 61776  727   79    4    5   88   21 226    0    0    0    0    1
        235      1660 0    0    0  1278   78  332    8   15   10    0   0    0    0    0    0    2
        235           0    0    0     0    0    0    0    0    5   10  25   30    0    0    0    3
        236      1660 0457044200 61776   40   25    1    2   28    4  13    0    0    0    0    1
        236      1660 0    0    0    44    3    0    2    2    0    0   0    0    0    0    0    2
        236           0457044200     0    0    0    0    0    2    3   5   10    0    0    0    3
        254      1660 0417044150 61776  156   14    1    1   15   13  47    0    0    0    0    1
        254      1660 0    0    0   220   17   13    4    3    0    0   0    0    0    0    0    2
        254           0417044150     0    0    0    0    0    2    3  45   45    0    0    0    3
        255      1660 0422044150 61776   70   10    1    1   10   10  20    0    0    0    0    1
        255      1660 0    0    0    53    3   15    6    0    0    0   0    0    0    0    0    2
        255           0    0    0     0    0    0    0    0    2    8  45   45    0    0    0    3
        256      1660 0427044150 61776   83   10    1    1   11   10  26    0    0    0    0    1
        256      1660 0    0    0    30    2    2    3    0   40    0   0    0    0    0    0    2
        256           0    0    0     0    0    0    0    0    2    8  35   55    0    0   10    3
        257      1660 0432044150 61776  112    6    1    1    6   10  32    0    0    0    0    1
        257      1660 0    0    0   146    9   26   20    1    0    0   0    0    0    0    0    2
        257      1660 0    0    0     0    0    0    0    0    5   10  40.  45    0    0    0    3
        258      1660 0437044150 61776  178   13    1    1   15   14  48    0    0    0    0    1
        258      1660 0    0    0   450   37   44   31    1   30    0   0    0    0    0    0    2
        258      1660 0    0    0     0    0    0    0    0   10   20  30   35    0    0    0    3
        259      1660 0442044150 61776  210   59    3    3   65   13  58    0    0    0    0    1
        259      1660 0    0    0   964   93   24    1    0   40    1   0    0    0    0    0    2
        259      1660 0    0    0     0    0    0    0    0    5    5  25   60    0    0    5    3
        260      1660 0447044150 61776  240   56    3    4   63   23  67    0    0    0    0    1
        260      1660 0    0    0   623   30  216    4    9   10    1   0    0    0    0    0    2
        260      1660 0    0    0     0    0    0    0    0    5   10  40   40    0    0   10    3
        261      1660 0452044150 61776   78   22    1    2   25    9  16    0    0    0    0    1
        261      1660 0    0    0   105    8    1    0    1    0    0   0    0    0    0    0    2
        261      1660 0452044150     0    0    0    0    0    2    3  10    5    0    0    5    3
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  OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)          PAGE     19
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                   VOL=STOR02   OPT: LN/PG=51               THOLD=10
   ---------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: CHEST     (CONT)                          ALIASES: NONE

                     280        1660 0412044100 61776    34     6    0    0    6    4    5    0    0    0    0    1
                     280        1660 0    0     0    16     1     0    1    0    0    0    0    0    0    0    0    2
                     280        1660 0412044100         0     0     0    0    5   10   10   10   35    0    0    0    3
                     281        1660 0417044100 61776    85    12    1    1   13   10   19    0    0    0    0    1
                     281        1660 0    0     0    73     6     2    3    1    0    0    0    0    0    0    0    2
                     281        1660 0    0     0     0     0     0    0    0    5   10   30   45    0    0    0    3
                     282        1660 0422044100 61776    94    21    1    1   23   15   25    0    0    0    0    1
                     282        1660 0    0     0    86     2    49   17    0    0    0    0    0    0    0    0    2
                     282        1660 0    0     0     0     0     0    0    0    5   10   30   45    0    0    0    3
                     283        1660 0427044100 61776   137    16    1    1   18    9   41    0    0    0    0    1
                     283        1660 0    0     0   498    44    22   19    1   40    0    0    0    0    0    0    2
                     283        1660 0    0     0     0     0     0    0    0    5   10   40   30    0    0   10    3
                     284        1660 0432044100 61776   170    12    1    1   13   10   53    0    0    6   13    1
                     284        1660 0    0     0   420    25   101   43    2    0    0    0    0    0    0    0    2
                     284        1660 0    0     0     0     0     0    0    0    5    5   50   35    0    0    0    3
                     285        1660 0437044100 61776   635   109    5    7  123   37  221    0    0    0    0    1
                     285        1660 0    0     0  2628   161   593  174   23   20    0    0    0    0    0    0    2
                     285        1650 0    0     0     0     0     0    0    0    5    5   35   35    0    0   10    3
                     286        1660 0442044100 61776   229    53    3    4   60   12   73    0    0    0    0    1
                     286        1630 0    0     0   276    15    49   70    0   30    0    0    0    0    0    0    2
                     286        1660 0    0     0     0     0     0    0    0    5   15   30   45    0    0   10    3
                     287        1660 0447044100 61776    82    43    2    3   49    7   23    0    0    0    0    1
                     287        1660 0    0     0    83     5    24    0    1   30    1    0    0    0    0    0    2
                     287        1660 0447044100         0     0     0    0    0    3    5   32   10    0    0   10    3
                     307        1660 0412044050 61776   230    27    1    2   30   11   80    0    0    0    0    1
                     307        1660 0    0     0   576    46    94    3    1    0    1    0    0    0    0    0    2
                     307        1630 0412044050         0     0     0    0    0   10   20   10   58    0    0    0    3
                     308        1650 0417044050 61776   191    23    1    2   26   11   60    0    0    0    0    1
                     308        1660 0    0     0   353    28    53    3    1   30    0    0    0    0    0    0    2
                     308        1650 0    0     0     0     0     0    0    0   10   20   30   40    0    0   10    3
                     309        1660 0422044050 61776   107    22    2    2   25   15   30    0    0    0    0    1
                     309        1660 0    0     0   152     4    99    9    0   30    0    0    0    0    0    0    2
                     309        1660 0    0     0     0     0     0    0    0    5   10   35   60    0    0   10    3
                     310        1660 0427044050 61776   399    64    3    4   72   26  129    0    0    6   13    1
                     310        1660 0    0     0  1933    99   187  542   19   30    0    0    0    0    0    0    2
                     310        1660 0    0     0     0     0     0    0    0    5   10   35   40    0    0   10    3
                     311        1660 0432044050 61776   320    62    3    4   70   25  100    0    0   16   40    1
                     311        1660 0    0     0  1004    57   242  124    5   30    0    0    0    0    0    0    2
                     311        1660 0    0     0     0     0     0    0    0    3    5   55   35    0    0   10    3
                     312        1660 0437044050 61776   277    24    1    1   27   12   93    0    0    0    0    1
                     312        1660 0    0     0   890    40   304  113    8   10    0    0    0    0    0    0    2
                     312        1660 0    0     0     0     0     0    0    0    3    5   50   25    0    0    0    3
                     313        1660 0442044050 61776    91    14    1    1   16    4   30    0    0    0    0    1
                     313        1660 0    0     0   119     5    24   43    0    0    0    0    0    0    0    0    2
                     313        1660 0    0     0     0     0     0    0    0    3    5   15   70    0    0    0    3
                     314        1650 0447044050 61776    11     6    0    0    7    1    3    0    0    0    0    1
                     314        1660 0    0     0     5     0     0    0    0    0    0    0    0    0    0    0    2
                     314        1660 0447044050         0     0     0    0    0    1    3    1    1    0    0    0    3
                     335        1650 0407044000 61776    95    10    1    1   11    7   29    0    0    0    0    1
                     335        1660 0    0     0   142     7    67    1    0    0    0    0    0    0    0    0    2
                     335        1660 0407044000         0     0     0    0    0   15   25    5   30    0    0    0    3
   OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.34       DATE: 01/27/83 (83027)        PAGE      20
PDS=CH1511.ESI.PHIL87.AQALLCC.PARMS             VOL=STOR02   OPT: LN/PG=51             THOLD=10
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  ---------------------------------------------------------------------------------------------------------------------------
                                                  ALIASES: NONE
MEMBER NAME: CHEST    (CONT)
                 336        1660 0412044000 61776   352    37     2     2   41   16  131     0     0     0     0     1
                 336        1660 0    0       0  1290   101   231    11     3   40    0    0     0     0     0     0     2
                 336             0    0       0     0     0     0     0     0    5   10   40    40     0     0    10     3
                 337        1660 0417044000 61776   133    11     1     1   12    8   46     0     0     0     0     1
                 337        1660 0    0       0   264    22    37     6     0    0    0    0     0     0     0     0     2
                 337             0    0       0     0     0     0     0     0    5   10   40    40     0     0     0     3
                 338        1660 0422044000 61776    75     5     1     1    6   12   22     0     0     3     0     1
                 338        1660 0    0       0    24     2     1     0     0    0    0    0     0     0     0     0     2
                 338             0    0       0     0     0     0     0     0    5   10   30    50     0     0     0     3
                 339        1660 0427044000 61776    75    10     1     1   10   10   24     0     0     0     0     1
                 339        1660 0    0       0    32     3     0     0     0    0    0    0     0     0     0     0     2
                 339             0    0       0     0     0     0     0     0   10   15   30    40     0     0     0     3
                 340        1660 0432044000 61776   137    10     1     1   11   10   43     0     0     0     0     1
                 340 .      1660 0    0       0   240     7   102    40     2    0    0    0     0     0     0     0     2
                 340             0    0       0     0     0     0     0     0   10   15   20    25     0     0     0     3
                 341        1660 0437044000 61776    22     1     0     0    2    1    7     0     0     0     0     1
                 341        1660 0    0       0    57     2    25    10     0    0    0    0     0     0     0     0     2
                 341             0437044000       0     0     0     0     0    0    0    5     5     0     0     0     3
                 364        1660 0407043950 61776    81     9     0     0   10    7   24     0     0     0     0     1
                 364        1660 0    0       0   154     4   104     1     0   30    0    0     0     0     0     0     2
                 364             0407043950       0     0     0     0     5   10   20    0    15     0     0     5     3
                 365        1660 0412043950 61776    93     9     0     0    9    7   30     0     0     5     0     1
                 365        1660 0    0       0   125     6    58     2     0   10    0    0     0     0     0     0     2
                 365             0    0       0     0     0     0     0     0    5   10   15    20     0     0    10     3
                 366        1660 0417043950 61776    47     4     1     1    5    3   15     0     0     0     0     1
                 366        1660 0    0       0    19     1     0     0     0    0    0    0     0     0     0     0     2
                 366             0    0       0     0     0     0     0     5   10   20    5    20     0     0     0     3
                 367        1660 0422043950 61776    45     4     1     1    5    9   15     0     0     0     0     1
                 367        1660 0    0       0    14     1     0     0     0    0    0    0     0     0     0     0     2
                 367             0    0       0     0     0     0     0     0    3    5   10    40     0     0     0     3
                 368        1660 0427043950 61776    49     6     0     0    6    7   15     0     0     0     0     1
                 368        1660 0    0       0    18     1     0     0     0    0    0    0     0     0     0     0     2
                 368             0    0       0     0     0     0     0     0    2    3   40    15     0     0     0     3
                 369        1660 0432043950 61776    36     2     0     0    3    5   11     0     0     0     0     1
                 369        1660 0    0       0     6     0     0     0     0    0    0    0     0     0     0     0     2
                 369             0432043950       0     0     0     0     0    2    5   15    10     0     0     0     3
                                                                                    291 LINE(S) IN THIS MEMBER
       ***** END OF MEMBER 'CHEST' *****
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    OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)         PAGE      21
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                 VOL=STOR02   OPT: LN/PG=51              THOLD=10
   -----------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: DELA                                       ALIASES: NONE
                            187        2360 0462044300 61776  382    66    3    4   73   18  203    0    0    0    0    1
                            187        2360 0   0    0  4277  366   225    6   37    0    0    0    0    0    0    0    2
                            187        2360 0462044300     0    0     0    0    0    1    2    0   10    0    0    0    3
                            188        2360 0467044300 61776 1611   238   13   15  266   66  518    0    0    0    0    1
                            188        2360 0   0    0  8250  618  1584   57   41   40    0    0    0    0    0    0    2
                            188        2360 0   0    0     0    0     0    0    0    2    3    0   15    0    0   10    3
                            189        2360 0472044300 61776    0     0    0    0    0    0    0    0    0    0    0    1
                            189        2360 0   0    0     0    0     0    0    0    0    0    0    0    0    0    0    2
                            189        2360 0   0    0     0    0     0    0    0    0    0    0    0    0    0    0    3
                            211        2360 0457044250 61776   19     2    0    0    2    1    6    0    0    0    0    1
                            211        2360 0   0    0    57    5     3    0    1    0    0    0    0    0    0    0    2
                            211        2360 0457044250     0    0     0    0    0    0    0    0    3    0    0    0    3
                            212        2360 0462044250 61776  920   105    5    6  117   42  292    0    0    0    0    1
                            212        2360 0   0    0  2627  193   174   20   42    0    0    0    0    0    0    0    2
                            212        2360 0   0    0     0    0     0    0    0   10   15    5   30    0    0    0    3
                            213        2360 0467044250 61776 2189   399   20   25  446   99  655    0    0    0    0    1
                            213        2360 0   0    0  7031  535  1025   14   60    0    0    0    0    0    0    0    2
                            213        2360 0   0    0     0    0     0    0    0    2    3    0   40    0    0    0    3
                            214        2360 0472044250 61776 2996   169    8   11  189  167  965    0    0    0    0    1
                            214        2360 0   0    0  5501  431   126   79   91   40    0    0    0    0    0    0    2
                            214        2360 0472044250     0    0     0    0    0    0    0    0    5    0    0    0    3
                            235        2360 0452044200 61776   54     2    0    0    3    2   17    0    0    0    0    1
                            235        2360 0   0    0    93    8     0    5    0    0    0    0    0    0    0    0    2
                            235        2360 0452044200     0    0     0    0    0    2    3    0   10    0    0    5    3
                            236        2360 0457044200 61776  201    31    1    2   35   17   95    0    0    0    0    1
                            236        2360 0   0    0   915   76    35    2   11    0    0    0    0    0    0    0    2
                            236        2360 0   0    0     0    0     0    0    5   10   15   25   30    0    0    0    3
                            237        2360 0462044200 61776 1272   114    6    7  128   52  399    0    0    0    0    1
                            237        2360 0   0    0  2779  221   104   25   42    0    1    0    0    0    0    0    2
                            237        2360 0   0    0     0    0     0    0    0   20   30    5   40    0    0    0    3
                            238        2360 0467044200 61776 2523   235   12   15  262  120  816    0    0    0    0    1
                            238        2360 0   0    0  6111  456   733   19   76    0    0    0    0    0    0    0    2
                            238        2360 0   0    0     0    0     0    0    0    3    5    0   35    0    0    0    3
                            239        2360 0472044200 61776 9163   505   26   31  555 4933264    0    0    0    0    1
                            239        2360 0   0    0 20002 1644  1156   44  209    0    0    0    0    0    0    0    2
                            239        2360 0   0    0     0    0     0    0    0    0    0    0    5    0    0    0    3
                            240        2360 0477044200 61776 3646   190    9   11  200 1941445    0    0    0    0    1
                            240        2360 0   0    0 12941 1051  1140    5  121   20    0    0    0    0    0    0    2
                            240        2360 0477044200     0    0     0    0    0    0    0    0    5    0    0    0    3
                            260        2360 0447044150 61776   21     8    0    1    9    2    7    0    0    0    0    1
                            260        2360 0   0    0    59    4    13    1    1    0    0    0    0    0    0    0    2
                            260        2360 0447044150     0    0     0    0    0    0    0    0   10    0    0    0    3
                            261        2360 0452044150 61776  529    45    2    3   50   23  164    0    0    0    0    1
                            261        2360 0   0    0   917   78    31   32    4   50    0    0    0    0    0    0    2
                            261        2360 0   0    0     0    0     0    0    0   10   15   40   35    0    0    0    3
                            262        2360 0457044150 61776  773   111    5    7  124   47  221    0    0    0    0    1
                            262        2360 0   0    0  4073  296   909   14   15   70    0    0    0    0    0    0    2
                            262        2360 0   0    0     0    0     0    0    0   20   30   10   30    0    0   10    3
                            263        2360 0462044150 61776 1991   221   11   13  245  119  669    0    0    0    0    1
                            263        2360 0   0    0  9569  737  1323   63   55   80    0    0    0    0    0    0    2
                            263        2360 0   0    0     0    0     0    0    0    5   15    0   35    0    0   10    3
    OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)        PAGE      22
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                VOL=STOR02   OPT: LN/PG=51              THOLD=10
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MEMBER NAME: DELA     (CONT)                    ALIASES: NONE
                  264        2360 0467044150 61776 4385  456  24  29 507 2381449    0    0    0    0    1
                  264        2360 0    0   0 13558 1024 2209  42  93  40   0   0    0    0    0    0    2
                  264        2360 0    0   0     0    0    0   0   0   5  10   0   15    0    0   10    3
                  265        2360 0472044150 61776 8085  376  22  25 414 4672935    0    1    1    1    1
                  265        2360 0    0   0 20614 1172 6782  53 183 140   0   0    0    0    0    0    2
                  265        2360 0    0   0     0    0    0   0   0   0   0   0   10    0    0   10    3
                  266        2360 0477044150 61776 3154  116   8   8 129 1741071    0    1    1    1    1
                  266        2360 0    0   0  6740  428 2099   2  29  40   0   0    0    0    0    0    2
                  266        2360 0    0   0     0    0    0   0   0   0   0   0    5    0    0    0    3
                  287        2360 0447044100 61776  150   56   3   4  62  12  51    0    0    0    0    1
                  287        2360 0    0   0   424   27   93   6   6  15   0   0    0    0    0    0    2
                  287        2360 0447044100     0    0    0   0  15  15  15   0   15    0    0    5    3
                  288        2360 0452044100 61776  550  168   9  12 188  34 174    0    0    0    0    1
                  288        2360 0    0   0  1357  100  250  20   8  30   0   0    0    0    0    0    2
                  288        2360 0    0   0     0    0    0   0   5   5  10  30   50    0    0   10    3
                  289        2360 0457044100 61776  922  135   7   9 150  53 290    0    0    0    0    1
                  289        2360 0    0   0  1559   86  598  15   6   0   0   0    0    0    0    0    2
                  289        2360 0    0   0     0    0    0   0   5   5  10  30   45    0    0    0    3
                  290        2360 0462044100 61776 3314  180  10  12 201 1631010    0    0    0    0    1
                  290        2360 0    0   0  4106  286  889  44  25   0   0   0    0    0    0    0    2
                  290        2360 0    0   0     0    0    0   0   0   5  10   0   25    0    0    0    3
                  291        2360 0467044100 61776 6214  584  36  42 649 4552151    9    0    0    0    1
                  291        2360 0    0   0 28863 171410820  32  69  80   1   0    0    0    0    0    2
                  291        2360 0    0   0     0    0    0   0   0   0   0   0   10    0    0    0    3
                  292        2360 0472044100 61776 2431  410  24  28 457 175 799   18    1    1    1    1
                  292        2360 0    0   0 13494  47613419   5  25   0   1   0    0    0    0    0    2
                  292        2360 0    0   0     0    0    0   0   0   0   0   0   10   25    0    0    3
                  293        2360 0477044100 61776  176   78   5   6  88  30  57   18    0    0    0    1
                  293        2360 0    0   0  4895   63 4246   0   1   0   1   0    0    0    0    0    2
                  293        2360 0477044100     0    0    0   0   0   0   0   0   15    5    0    0    3
                  315        2360 0452044050 61776   28    9   0   1   9   2   9    0    0    0    0    1
                  315        2360 0    0   0    64    5   10   1   0   0   0   0    0    0    0    0    2
                  315        2360 0452044050     0    0    0   0   0   5   5   0    0    0    0    0    3
                  316        2360 0457044050 61776  397   59   3   4  65  18 125    0    0    0    0    1
                  316        2360 0    0   0   691   50  147   4   3   0   0   0    0    0    0    0    2
                  316        2360 0    0   0     0    0    0   0   0   5  10   0   25    0    0    0    3
                  317        2360 0462044050 61776 2331  374  24  30 419 220 806   15    0    0    0    1
                  317        2360 0    0   0 10879  554 4972   4  30  60   1   0    0    0    0    0    2
                  317        2360 0    0   0     0    0    0   0   0   0   0   0   20    0    0    0    3
                  318        2360 0467044050 61776  783   53   7   7  64 136 266   16    0    0    0    1
                  318        2360 0    0   0  3703  110 2471   0  11   0   1   0    0    0    0    0    2
                  318        2360 0467044050     0    0    0   0   0   0   0   0    5    0    0    0    3
         ***** END OF MEMBER 'DELA' *****                                          93 LINE(S) IN THIS MEMBER
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   OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 5-4     TIME:  16.49.34       DATE: 01/27/83 (83027)          PAGE      23
PDS=CN1511.ESI.PHIL87.AQALLOC.FARMS                VOL=STOR02   OPT: LN/PG=51                THOLD=10
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MEMBER NAME: GLOUC                                  ALIASES: NONE
                       291        1760 0467044100 61776    13     2    0    0    2    3    4    4    0    0    0    1
                       291        1760 0    0    0    88     2    64    0    0    0    1    0    0    0    0    0    2
                       291        1760 0    0    0     0     0     0    0    0    0    0    0    0    0    0    0    3
                       292        1760 0472044100 61776    64    10    1    1   12   14   20   17    0    0    0    1
                       292        1760 0    0    0   438    12   318    0    0    0    1    0    0    0    0    0    2
                       292        1760 0472044100     0     0     0    0    0    0    5    0   10    0    0    5    3
                       293        1760 0477044100 61776   479    49    4    4   55   23  155   17   41  342  603    1
                       293        1760 0    0    0  1454    93   490    2    3    0    1    0    0    0    0    0    2
                       293        1760 0    0    0     0     0     0    0    0   10   15    5   10    0    0   25    3
                       294        1760 0482044100 61776   919   108    6    7  121   26  283   15    0    0    0    1
                       294        1760 0    0    0  1675   111   498    7    5    0    1    0    0    0    0    0    2
                       294        1760 0    0    0     0     0     0    0    0   10   10    0    5    0    0   20    3
                       295        1760 0487044100 61776  1563   296   16   20  331   26  520    5    0    0    0    1
                       295        1760 0    0    0  5735   401  1252   41   43   25    1    0    0    0    0    0    2
                       295        1760 0    0    0     0     0     0    0    0    0    0    0    0    0    0    0    3
                       296        1760 0492044100 61776    57     3    0    1    9    0   17    0    0    0    0    1
                       296        1760 0    0    0   140    10    27    1    1    0    0    0    0    0    0    0    2
                       296        1760 0    0    0     0     0     0    0    0    0    0    0    0    0    0    0    3
                       317        1760 0462044050 61776    30    10    1    1   11    1   11    9    0    0    0    1
                       317        1760 0    0    0    82     7    11    1    0    0    1    0    0    0    0    0    2
                       317        1760 0462044050     0     0     0    0    0    0    0    0    0    0    0    0    3
                       318        1760 0467044050 61776   198    63    4    5   72    6   73   15    0  120   22    1
                       318        1760 0    0    0   626    43   162    7    2   10    1    0    0    0    0    0    2
                       318        1760 0    0    0     0     0     0    0    0   10   10    5   10   10    0   20    3
                       319        1760 0472044050 61776   532    93    6    7  106   14  168    0    1  204  322    1
                       319        1760 0    0    0  3331    90  2310    2    4   40    1    0    0    0    0    0    2
                       319        1760 0    0    0     0     0     0    0    0    5    5   10   25    5    0   10    3
                       320        1760 0477044050 61776   838   109    6    8  123   17  271    0    1   84  300    1
                       320        1760 0    0    0  2502   152   912    6    5   30    1    0    0    0    0    0    2
                       320        1760 0    0    0     0     0     0    0    0   10   10   20   20    5    0   20    3
                       321        1760 0482044050 61776  1271   133    8   10  172   18  405    0    1   84  300    1
                       321        1760 0    0    0  4033   292   846   10   25   20    1    0    0    0    0    0    2
                       321        1760 0    0    0     0     0     0    0    0    5    5   35   10    0    0   10    3
                       322        1760 0487044050 61776  2023   348   19   23  391   23  630    0    0    0    0    1
                       322        1760 0    0    0  6651   526   800   16   56   30    1    0    0    0    0    0    2
                       322        1760 0    0    0     0     0     0    0    0   10   10   15   15    0    0   20    3
                       323        1760 0492044050 61776   203    41    2    3   47    2   83    0    0    0    0    1
                       323        1760 0    0    0   701    51   134    4    6    0    0    0    0    0    0    0    2
                       323        1760 0    0    0     0     0     0    0    0    5    5    0   10    0    0   10    3
                       346        1760 0462044000 61776    60    20    1    1   23    2   22    3    0    0    0    1
                       346        1760 0    0    0   165    13    22    2    1   10    0    0    0    0    0    0    2
                       346        1760 0462044000     0     0     0    0    0    0    0    0   10   10    0    0    3
                       347        1760 0467044000 61776   222    63    4    5   77    6   82    0  120   22    0    1
                       347        1760 0    0    0   669    55    82    7    3   20    1    0    0    0    0    0    2
                       347        1760 0    0    0     0     0     0    0    0    5    5   30   10   10    0   10    3
                       348        1760 0472044000 61776   319    74    4    5   84    8  112    0  120   22    0    1
                       348        1760 0    0    0  1079    93   102    6    4    0    1    0    0    0    0    0    2
                       348        1760 0    0    0     0     0     0    0    0    5   10   50   30    0    0   15    3
                       349        1760 0477044000 61776   337   106    6    7  120   12  124    0    0    0    0    1
                       349        1760 0    0    0   420    32    74    8    2    0    1    0    0    0    0    0    2
                       349        1760 0    0    0     0     0     0    0    0    0    0   50   45    0    0    0    3
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"         VER 3-4     TIME:  16.49.34         DATE: 01/27/83 (83027)         PAGE      24
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                  VOL=STOR02   OPT: LN/PG=51                THOLD=10
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MEMBER NAME: GLOUC     (CONT)                          ALIASES: NONE

                         350        1760 0482044000 61776  666    68    4    5   76   11 201    0    0    0    0    1
                         350        1760 0    0     0   965   54   353    6    6    0    1   0    0    0    0    0    2
                         350        1760 0    0     0     0    0     0    0    5   10    5  35   30    0    0   20    3
                         351        1760 0487044000 61776 1241   207   11   14  233   21 374    0    0    6    0    1
                         351        1760 0    0     0  2288  153   549   21   17   35    0   0    0    0    0    0    2
                         351        1760 0    0     0     0    0     0    0   10    5   15  35   20    0    0   30    3
                         352        1760 0492044000 61776  683    53    3    4   65    4 204    0    0    0    0    1
                         352        1760 0    0     0  1053   75   214   21    6    0    0   0    0    0    0    0    2
                         352        1760 0    0     0     0    0     0    0    5   10    5  25   20    0    0   20    3
                         376        1760 0467043950 61776  247    48    3    3   54    5  87    0    0    0    0    1
                         376        1760 0    0     0   956   83    90    4    3    0    0   0    0    0    0    0    2
                         376        1760 0467043950       0    0     0    0    5    5    0  30   20    0    0   10    3
                         377        1760 0472043950 61776  438   102    6    6  114   24 179    0    0    0    0    1
                         377        1760 0    0     0  1376  121   600    6    5    0    0   0    0    0    0    0    2
                         377        1760 0    0     0     0    0     0    0   10    5    0  50   25    0    0   15    3
                         378        1760 0477043950 61776  155    28    1    2   31    8  50    0    0    0    0    1
                         378        1760 0    0     0   244   19     7    8    4    0    0   0    0    0    0    0    2
                         378        1760 0    0     0     0    0     0    0   10    5   10  35   25    0    0   25    3
                         379        1760 0482043950 61776  296    32    2    2   36    8  91    0    0    0    0    1
                         379        1760 0    0     0   435   27   109    8    4    0    0   0    0    0    0    0    2
                         379        1760 0    0     0     0    0     0    0    5   10   35  40   10    0    0   50    3
                         380        1760 0487043950 61776 1913   141    7    8  156   26 633    0    0    0    0    1
                         380        1760 0    0     0  5519  289  2442   24   14   30    1   0    0    0    0    0    2
                         380        1760 0    0     0     0    0     0    0    5    5   10  20    5    0    0   20    3
                         381        1760 0492043950 61776 1228    83    4    5   93    8 364    0    0   66    2    1
                         381        1760 0    0     0  1530  113   331   43    7    0    1   0    0    0    0    0    2
                         381        1760 0    0     0     0    0     0    0    5    5   20  45   20    0    0   30    3
                         382        1760 0497043950 61776  332    23    1    1   26    3 100    0    0   66    2    1
                         382        1760 0    0     0   392   28    86   10    2    0    0   0    0    0    0    0    2
                         382        1760 0    0     0     0    0     0    0    5   10    0  20    5    0    0   15    3
                         400        1760 0467043900 61776   67    15    1    1   17    2  30    0    0    0    0    1
                         400        1760 0    0     0   350   30    32    1    1    0    0   0    0    0    0    0    2
                         400        1760 0467043900       0    0     0    0    0    0    0   5    0    0    0    0    3
                         401        1760 0472043900 61776  124    26    1    2   29    7  41    0    0    0    0    1
                         401        1760 0    0     0   373   33    32    1    1    0    0   0    0    0    0    0    2
                         401        1760 0    0     0     0    0     0    0    0    0    0  25    5    0    0    0    3
                         402        1760 0477043900 61776  105    30    2    2   34   11  32    0    0    0    0    1
                         402        1760 0    0     0    66    6     3    1    0    0    0   0    0    0    0    0    2
                         402        1760 0    0     0     0    0     0    0   15    5   10  25   10    0    0   30    3
                         403        1760 0482043900 61776  233    45    2    3   50    8  74    0    0    0    0    1
                         403        1760 0    0     0   363   26    83    3    2    0    1   0    0    0    0    0    2
                         403        1760 0    0     0     0    0     0    0   15    5   10  35   30    0    0   30    3
                         404        1760 0487043900 61776  829    64    3    4   72   13 255    0    0    0    0    1
                         404        1760 0    0     0  2138  146   602    1    7   60    0   0    0    0    0    0    2
                         404        1760 0    0     0     0    0     0    0   10    5   15  30   25    0    0   30    3
                         405        1760 0492043900 61776 1014    57    3    3   63   14 314    0    0   66    2    1
                         405        1760 0    0     0  2125  148   557    5    3    0    1   0    0    0    0    0    2
                         405        1760 0    0     0     0    0     0    0   45   15   15   5   10    5    0   75    3
                         406        1760 0497043900 61776  685    82    4    6   91   12 233    0    0   66    2    1
                         406        1760 0    0     0  1537   83   512    2   15    0    0   0    0    0    0    0    2
                         406        1760 0    0     0     0    0     0    0   20    5   10  20   25    0    0   35    3
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)          PAGE     25
  PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                 VOL=STOR02    OPT: LN/PG=51               THOLD=10
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  MEMBER NAME: GLOUC     (CONT)                           ALIASES: NONE

                           407       1760 0502043900 61776   481    56     3    4   63    8  163    0    0    0    0    1
                           407       1760 0    0    0  1021    56   346     1   10    0    0    0    0    0    0    0    2
                           407       1760 0    0    0     0     0     0     0   30    0    5   20   10    5    0   35    3
                           408       1760 0507043900 61776     0     0     0    0    0    0    0    0    0    0    0    1
                           408       1760 0    0    0     0     0     0     0    0    0    0    0    0    0    0    0    2
                           408       1760 0    0    0     0     0     0     0    0    0    0    0    0    5    0    0    3
                           425       1760 0482043850 61776    32    11     1    1   12    2   10    0    0    0    0    1
                           425       1760 0    0    0    10     1     3     0    0    0    0    0    0    0    0    0    2
                           425       1760 0482043850     0     0     0     0    5    5    5   10    0    0    0   15    3
                           426       1760 0487043850 61776   261    39     2    3   43    8   84    0    0    0    0    1
                           426       1760 0    0    0   280    20    61     1    2   30    0    0    0    0    0    0    2
                           426       1760 0    0    0     0     0     0     0   10    5   15   25   25    0    0   30    3
                           427       1760 0492043850 61776   364    23     1    1   26    8  116    0    0    0    0    1
                           427       1760 0    0    0   514    38   103     2    3   20    0    0    0    0    0    0    2
                           427       1760 0    0    0     0     0     0     0   25    5   15   20   25    0    0   45    3
                           428       1760 0497043850 61776   216    18     1    1   20    3   69    0    0    0    0    1
                           428       1760 0    0    0   214    13    60     2    2    0    0    0    0    0    0    0    2
                           428       1760 0    0    0     0     0     0     0   35    5   10   20   20    0    0   50    3
                           429       1760 0502043850 61776   298    25     1    2   28    4   96    0    0    0    0    1
                           429       1760 0    0    0   206    12    64     1    2    0    1    0    0    0    0    0    2
                           429       1760 0    0    0     0     0     0     0   40    5   10   20   25    0    0   55    3
                           430       1760 0507043850 61776    95     8     0    0    9    1   31    0    0    0    0    1
                           430       1760 0    0    0    66     4    20     0    1    0    0    0    0    0    0    0    2
                           430       1760 0    0    0     0     0     0     0   40    5    5   10   35    0    0   50    3
                           448       1760 0487043800 61776    54     4     0    0    5    1   17    0    0    0    0    1
                           448       1760 0    0    0    73     5    19     1    1    0    0    0    0    0    0    0    2
                           448       1760 0487043800     0     0     0     0   25    0    0    0    0   10    0   25    3
                           449       1760 0492043800 61776   140    12     1    1   13    2   44    0    0    0    0    1
                           449       1760 0    0    0   190    12    50     2    2   20    0    0    0    0    0    0    2
                           449       1760 0    0    0     0     0     0     0   15    0    5    0    5    0    0   20    3
                           450       1760 0497043800 61776   194    16     1    1   18    3   63    0    0    0    0    1
                           450       1760 0    0    0   264    17    69     3    2    0    0    0    0    0    0    0    2
                           450       1760 0    0    0     0     0     0     0   45    5   10   20   15    0    0   60    3
                           451       1760 0502043800 61776   227    19     1    1   21    3   73    0    0    0    0    1
                           451       1760 0    0    0   229    14    64     2    2    0    0    0    0    0    0    0    2
                           451       1760 0    0    0     0     0     0     0   55    0   10   10   20    5    0   65    3
                           452       1760 0507043800 61776   119    10     0    1   11    2   38    0    0    0    0    1
                           452       1760 0    0    0    82     5    26     0    1   30    1    0    0    0    0    0    2
                           452       1760 0    0    0     0     0     0     0   25    5    5    0    5   10    0   35    3
                           468       1760 0492043750 61776    54     4     0    0    5    1   17    0    0    0    0    1
                           468       1760 0    0    0    73     5    19     1    1   10    0    0    0    0    0    0    2
                           468       1760 0492043750     0     0     0     0    5    0    0   10    0    0    0    5    3
                           469       1760 0497043750 61776   264    10     1    2   11   19   86    0    0    0    0    1
                           469       1760 0    0    0   699    24   261    33    5   30    0    0    0    0    0    0    2
                           469       1760 0    0    0     0     0     0     0   25    0    5   30   20    0    0   30    3
                           470       1760 0502043750 61776    97     8     0    1    9    2   31    0    0    8    0    1
                           470       1760 0    0    0   132     8    35     1    1   10    0    0    0    0    0    0    2
                           470       1760 0    0    0     0     0     0     0   30    0    5   20   10    0    0   35    3

         ***** END OF MEMBER 'GLOUC' *****                                                153 LINE(S) IN THIS MEMBER
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PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                VOL=STOR02   OPT: LN/PG=51             THOLD=10
-----------------------------------------------------------------------------------------------------

MEMBER NAME: MERC                                      ALIASES: NONE

                31       2980 0517044700 61776  410    48    3    3   53   38 143    0    0    0    0    1
                31       2980 0    0    0   621    22   334    1    1   25    0   0    0    0    0    0    2
                31       2980 0517044700      0     0     0    0    0    8    5  20   50    0    0    0    3
                44       2980 0512044650 61776  164    19    1    1   21    7  54    0    0    0    0    1
                44       2980 0    0    0   259    10    50    1    3    0    0   0    0    0    0    0    2
                44       2980 0512044650      0     0     0    0    0   18    0  30   55    0    0    0    3
                45       2980 0517044650 61776  211    15    1    1   16   12  68    0    0    0    0    1
                45       2980 0    0    0   677    20   400    1    2   30    0   0    0    0    0    0    2
                45       2980 0    0    0     0     0     0    0    5    5    3  40   55    0    0    0    3
                46       2980 0522044650 61776  504    35    2    2   39   16 165    0    0    0    0    1
                46       2980 0    0    0  1593   101   489    8    6    0    0   0    0    0    0    0    2
                46       2980 0    0    0     0     0     0    0   15    5    3  50   20    0    0    0    3
                47       2980 0527044650 61776 2270   103    8   11  202   99 703    0    0    0    0    1
                47       2980 0    0    0 13205  1200   776   15   37    0    1   0    0    0    0    0    2
                47       2980 0    0    0     0     0     0    0   20   10    5  20   15    0    0    0    3
                60       2980 0502044600 61776   13     2    0    0    2    1   4    0    0    0    0    1
                60       2980 0    0    0    21     1     4    0    0    0    1   0    0    0    0    0    2
                60       2980 0    0    0     0     0     0    0    0    0    0   0    0    0    0    0    3
                61       2980 0507044600 61776  118    14    1    1   15    5  39    0    0    0    0    1
                61       2980 0    0    0   187    13    36    1    2    0    1   0    0    0    0    0    2
                61       2980 0507044600      0     0     0    0    0   20    5   5   15    0    0    0    3
                62       2980 0512044600 61776  229    27    1    2   29   10  75    0    0   15   20    1
                62       2980 0    0    0   363    24    70    1    4    0    0   0    0    0    0    0    2
                62       2980 0    0    0     0     0     0    0    0    5    0  55   35    0    0    0    3
                63       2980 0517044600 61776  478    68    3    4   75   38 163    0    0   15   20    1
                63       2980 0    0    0  1753    98   602   44    7   30    0   0    0    0    0    0    2
                63       2980 0    0    0     0     0     0    0    5    5    3  40   20    0    0    0    3
                64       2980 0522044600 61776  640   101    5    7  113   17 180    0    0    0    0    1
                64       2980 0    0    0  3869   299   761   14   10    0    1   0    0    0    0    0    2
                64       2980 0    0    0     0     0     0    0    5    0    2  55   30    0    0    0    3
                65       2980 0527044600 61776  533   192    9   11  213   36 207    0    0    0    0    1
                65       2980 0    0    0  7273   570  1432   13   13   20    1   0    0    0    0    0    2
                65       2980 0    0    0     0     0     0    0    5   10   10  30   35    0    0    0    3
                66       2980 0532044600 61776  211    23    1    1   26    9  69    0    0    0    0    1
                66       2980 0    0    0   577    41   154    1    1   25    0   0    0    0    0    0    2
                66       2980 0    0    0     0     0     0    0    5    0    0  30   20    0    0    0    3
                81       2980 0512044550 61776  689   167    8   11  186   23 284    0    0   30   40    1
                81       2980 0    0    0 11606   834  3149    6   13   25    1   0    0    0    0    0    2
                81       2980 0512044550      0     0     0    0    0    5    0  10   40    0    0    0    3
                82       2980 0517044550 61776 2624   336   13   22  375  116 890    0    0   15   20    1
                82       2980 0    0    0  9307   724  1658   20   33   10    0   0    0    0    0    0    2
                82       2980 0    0    0     0     0     0    0    0    5    5   5   15    0    0    0    3
                83       2980 0522044550 61776 1409   201   11   13  203   55 467    0    0    0    0    1
                83       2980 0    0    0  8310   556  2296   30   40   20    1   0    0    0    0    0    2
                83       2980 0    0    0     0     0     0    0    5    5    0   5   15    0    0    0    3
                84       2980 0527044550 61776  697    85    4    5   94   24 220    0    0    0    0    1
                84       2980 0    0    0  3189   193   399   17   30   22    0   0    0    0    0    0    2
                84       2980 0    0    0     0     0     0    0    2   15    3  35   35    0    0    0    3
                85       2980 0532044550 61776  419    42    2    3   47   14 141    0    0    0    0    1
                85       2980 0    0    0   732    43   273    1    2    0    0   0    0    0    0    0    2
                85       2980 0    0    0     0     0     0    0    3   15    2  60   20    0    0    0    3
```

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  OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.34       DATE: 01/27/83 (83027)        PAGE     27
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                 VOL=STOR02   OPT: LN/PG=51              THOLD=10
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MEMBER NAME: MERC      (CONT)                       ALIASES: NONE

                     86        2980 0537044550 61776 2640  287  14  18 319  671011   0    0    0    0   1
                     86        2930 0    0    0  7797  444 3267  14   5  35    1   0   0    0    0    0   2
                     86        2930 0    0    0     0    0    0   0   5   5    0  15  15    0    0    0   3
                     87        2980 0542044550 61776  403   68   4   5  78   10 165   0    0    0    0   1
                     87        2930 0    0    0   553   34  190  10   1  10    1   0   0    0    0    0   2
                     87        2980 0    0    0     0    0    0   0  10   0    0  10  15    0    0    0   3
                    103        2930 0512044500 61776  424   48   2   3  53   35 113   0    0    0    0   1
                    103        2930 0    0    0  1925  134  557   2   2   0    1   0   0    0    0    0   2
                    103        2980 0    0    0     0    0    0   0   0   0    0   0   0    0    0    0   3
                    104        2930 0517044500 61776 7293  429  22  25 469  5092623  10    0    0    0   1
                    104        2980 0    0    0 59086 436614013  23 124  15    1   0   0    0    0    0   2
                    104        2930 0517044500     0    0    0   0   0   0    0   0   2    0    0    0   3
                    105        2930 0522044500 61776 4631  327  16  19 360  2491699   0    0    0    0   1
                    105        2930 0    0    0 23373   90313282  28  96  20    0   0   0    0    0    0   2
                    105        2930 0    0    0     0    0    0   0   0   0    0   0   5    0    0    0   3
                    106        2930 0527044500 61776 2056  233  12  15 258   98 640   0    0    0    0   1
                    106        2980 0    0    0  4650  357  839   8  20  15    0   0   0    0    0    0   2
                    106        2980 0    0    0     0    0    0   0   0  15    0   5  15    0    0    0   3
                    107        2980 0532044500 61776  333  130   7   9 145   13 123   0    0   20    1   1
                    107        2980 0    0    0  1311   87  310   3  12  40    0   0   0    0    0    0   2
                    107        2980 0    0    0     0    0    0   0   5  15    5  45  20    0    0    0   3
                    108        2980 0537044500 61776  551  125   7   9 142   16 219   0    0    0    0   1
                    108        2980 0    0    0  1135   72  328  11   7   0    0   0   0    0    0    0   2
                    108        2980 0    0    0     0    0    0   0   5   5    2  25  10    0    0    0   3
                    127        2980 0517044450 61776  514   43   2   3  47   51 194  11    0    0    0   1
                    127        2980 0    0    0  1566   79  746   0   2   0    1   0   0    0    0    0   2
                    127        2930 0517044450     0    0    0   0   5  10    0   0   0   35    0    0   3
                    128        2980 0522044450 61776 2224  237  12  15 264   86 807  13    0    0    0   1
                    128        2930 0    0    0  4468  377  474  19  18   0    1   0   0    0    0    0   2
                    128        2980 0    0    0     0    0    0   0   5   5    0  20  15    0    0    0   3
                    129        2930 0527044450 61776 1379  239  14  17 270   64 420   0    0    0    0   1
                    129        2930 0    0    0  2259  123  898   4  10   0    0   0   0    0    0    0   2
                    129        2980 0    0    0     0    0    0   0   2   2    0  30  10    0    0    0   3
                    130        2930 0532044450 61776  255   93   6   7 110   12  89   0    0    5    0   1
                    130        2980 0    0    0   671   43  177   1   6   0    0   0   0    0    0    0   2
                    130        2930 0    0    0     0    0    0   0   0   0    0   0   0    5    0    0   3
                    151        2930 0522044400 61776   60   13   1   1  15    3  32   3    0    0    0   1
                    151        2930 0    0    0   226   20   20   0   0   0    0   0   0    0    0    0   2
                    151        2980 0    0    0     0    0    0   0   0   0    0   0   0  100    0    0   3
                    152        2980 0527044400 61776   53   20   1   1  23    3  17   0    0    0    0   1
                    152        2980 0    0    0    44    2   19   0   0   0    0   0   0    0    0    0   2
                    152             0    0    0     0    0    0   0   0   5    5  45  45    0    0   10   3
                    153        2930 0532044400 61776  107   40   2   3  45    6  34   0    0    0    0   1
                    153        2930 0    0    0    69    4   39   0   1   0    0   0   0    0    0    0   2
                    153        2930 0532044400     0    0    0   0   0   0    0  25   5    0    0    0   3

        ***** END OF MEMBER 'MERC' *****                                      96 LINE(S) IN THIS MEMBER
  OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)          PAGE     28
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                      VOL=STOR02   OPT: LN/PG=51              THOLD=10
-------------------------------------------------------------------------------------------------------------------------------

MEMBER NAME: MONT                                         ALIASES: NONE

                        21      6000 0452044700 61776  213   14   1   1  15  42  73   0   0   0   0   1
                        21      6000 0   0    0   643   17  436   2   3  10   1   0   0   0   0   0   2
                        21      6000 0452044700     0    0    0   0   1  15  20   5  55   0   5   0   3
                        22      6000 0457044700 61776  607   79   4   4  38 143 213   0   0   2   0   1
                        22      6000 0   0    0  3217  142 1678   4   8  30   1   0   0   0   0   0   2
                        22      6000 0   0    0     0    0    0   0   1   2   7   4  40   0   4   0   3
                        23      6000 0462044700 61776   29    1   0   0   1   6   9   0   0   0   0   1
                        23      6000 0   0    0    29    2    1   3   0   0   1   0   0   0   0   0   2
                        23      6000 0462044700     0    0    0   0   0   0   0   0  20   0   0   0   3
                        32      6000 0447044650 61776   59    1   1   1   1  30  18   0   0   0   0   1
                        32      6000 0   0    0    58    1   41   2   0   0   0   0   0   0   0   0   2
                        32      6000 0447044650     0    0    0   0   0   5  10  35  45  10  35   0   3
                        33      6000 0452044650 61776  191   13   1   1  14  39  61   0   0   0   0   1
                        33      6000 0   0    0   383   20  142   2   3   0   0   0   0   0   0   0   2
                        33      6000 0   0    0     0    0    0   0  10  30  40   5  10   0   5   0   3
                        34      6000 0457044650 61776  335   29   2   2  32  90 114   0   0   0   0   1
                        34      6000 0   0    0  1163   57  528  16   4  30   0   0   0   0   0   0   2
                        34      6000 0   0    0     0    0    0   0   1   5  10  35  35   0  35   0   3
                        35      6000 0462044650 61776  156   33   2   2  37  39  51   0   0   0   0   1
                        35      6000 0   0    0   148   11   11  10   1   0   0   0   0   0   0   0   2
                        35      6000 0   0    0     0    0    0   0   8  20  32   0  20   0   0   0   3
                        36      6000 0467044650 61776   37   20   1   1  23  12  12   0   0   0   0   1
                        36      6000 0   0    0    32    3    4   0   0   0   0   0   0   0   0   0   2
                        36      6000 0467044650     0    0    0   0   0   1   2   3  25   0   3   0   3
                        48      6000 0442044600 61776  124   13   1   1  15  18  45   0   0   0   0   1
                        48      6000 0   0    0   248   17   53   1   2   0   0   0   0   0   0   0   2
                        48      6000 0442044600     0    0    0   0   0   0   0  25  70   0  25   0   3
                        49      6000 0447044600 61776  517   63   3   4  70  66 192   0   0   5   3   1
                        49      6000 0   0    0  1214   86  258   0   8   0   0   0   0   0   0   0   2
                        49      6000 0   0    0     0    0    0   0   0   2   3  65  25   0  65   0   3
                        50      6000 0452044600 61776  172   13   1   1  14  33  55   0   0   0   0   1
                        50      6000 0   0    0   278   24   13   0   2   0   0   0   0   0   0   0   2
                        50      6000 0   0    0     0    0    0   0   2   5  10  60  20   0  60   0   3
                        51      6000 0457044600 61776  257   40   2   3  44 108  83   0   0   0   0   1
                        51      6000 0   0    0   399   20  158   7   2  35   1   0   0   0   0   0   2
                        51      6000 0   0    0     0    0    0   0  10  15  20  20  30   0  20   0   3
                        52      6000 0462044600 61776  219   71   4   5  80  60  70   0   0   0   0   1
                        52      6000 0   0    0   469   29  133   3   4   0   0   0   0   0   0   0   2
                        52      6000 0   0    0     0    0    0   0   5  10  20  40  25   0  40   0   3
                        53      6000 0467044600 61776  558   64   5   5  73 104 179   0   0   0   0   1
                        53      6000 0   0    0  1440   86  402   3  16   0   0   0   0   0   0   0   2
                        53      6000 0   0    0     0    0    0   0   0   5   5  40  45   0  40   0   3
                        54      6000 0472044600 61776  937   39   3   3  42 170 337   0   0   0   0   1
                        54      6000 0   0    0  2940  190  820   1  19  30   0   0   0   0   0   0   2
                        54      6000 0472044600     0    0    0   0   0   0   0   5  20   0   5  16   3
                        67      6000 0442044550 61776 2297  117   8   8 128 443 853   0   1  34  93   1
                        67      6000 0   0    0 11705  643 4625  14  57   0   0   0   0   0   0   0   2
                        67      6000 0442044550     0    0    0   0   0   0   5  40  30   0  40   0   3
                        68      6000 0447044550 61776 1170   60   4   4  66 171 389   0   0   0   0   1
                        68      6000 0   0    0  3359  132 1797  26  17   0   0   0   0   0   0   0   2
                        68      6000 0   0    0     0    0    0   0   5  10  20  20  30   0  20   0   3
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.34        DATE: 01/27/[illegible] ([illegible])      PAGE     29
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS               VOL=STOR02   OPT: LN/PG=51              THOLD=10
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MEMBER NAME: MONT     (CONT)                          ALIASES: NONE

                      69      6000 0452044550 61776   227    30    2    2   34   57   74    0    1   14   75    1
                      69      6000 0    0     0   618    36   194    2    5    0    0    0    0    0    0    0    2
                      69      6000 0    0     0     0     0     0    0    5   20   30   25   20    0   25    0    3
                      70      6000 0457044550 61776   493    68    2    4   76  142  167    0    0    0    0    1
                      70      6000 0    0     0   994    65   250    7    7   35    1    0    0    0    0    0    2
                      70      6000 0    0     0     0     0     0    0    5    5   20   20   40    0   20    0    3
                      71      6000 0462044550 61776   423    34    2    2   38   74  134    0    0    0    0    1
                      71      6000 0    0     0  1262    93   218    6    7    0    0    0    0    0    0    0    2
                      71      6000 0    0     0     0     0     0    0    0    2    3   75   20    0   75    0    3
                      72      6000 0467044550 61776   591    76    4    5   86   83  186    0    0    0    0    1
                      72      6000 0    0     0  1681   115   384    6   12    0    0    0    0    0    0    0    2
                      72      6000 0    0     0     0     0     0    0    0    2    3   75   20    0   75    0    3
                      73      6000 0472044550 61776  1261   123    5    8  134  277  657    0    0    0    0    1
                      73      6000 0    0     0  9129   241  6067   35   56   40    0    0    0    0    0    0    2
                      73      6000 0    0     0     0     0     0    0    0    0    0   60   30    0   60   10    3
                      74      6000 0477044550 61776   658    84    4    5   93   69  231    0    0    0    0    1
                      74      6000 0    0     0  3513   166  1564    4   25   25    0    0    0    0    0    0    2
                      74      6000 0    0     C     0     0     0    0    0    2    3   30   23    0   30   10    3
                      75      6000 0482044550 61776     0     0    0    0    0    0    0    0    0    0    0    1
                      75      6000 0    0     0     0     0     0    0    0    0    0    0    0    0    0    0    2
                      75      6000 0482044550     0     0     0    0    0    0    0   99    0    0   99    0    3
                      83      6000 0437044500 61776    16     0    0    0    0    6    5    0    0    0    0    1
                      88      6000 0    0     0    29     2     8    0    0    0    0    0    0    0    0    0    2
                      88      6000 0    0     0     0     0     0    0    0    0    0    0    0    0    0    0    3
                      89      6000 0442044500 61776   322    47    2    3   52  100  122    0    0    0    0    1
                      89      6000 0    0     0  7445   331  3363    0    6    0    0    0    0    0    0    0    2
                      89      6000 0442044500     0     0     0    0    0    0    0    0    5    0    0    0    3
                      90      6000 0447044500 61776   587    84    4    5   94   84  209    0    0    0    0    1
                      90      6000 0    0     0  6320   214  3867   19   27    0    0    0    0    0    0    0    2
                      90      6000 0    0     0     0     0     0    0    0    1    3   20    8    0   20    0    3
                      91      6000 0452044500 61776   346    77    4    5   87   44  115    0    1   20  112    1
                      91      6000 0    0     0  1398    72   414    7   26    0    0    0    0    0    0    0    2
                      91      6000 0    0     0     0     0     0    0    0    1    3   80   15    0   80    0    3
                      92      6000 0457044500 61776   597    61    3    4   69  106  183    0    0    0    0    1
                      92      6000 0    0     0  1401    79   501    8    9   30    1    0    0    0    0    0    2
                      92      6000 0    0     0     0     0     0    0    0    1    3   85   10    0   85    0    3
                      93      6000 0462044500 61776   514    45    2    3   51  102  119    0    0    3   28    1
                      93      6000 0    0     0  1130    91   105    2   11    0    0    0    0    0    0    0    2
                      93      6000 0    0     0     0     0     0    0    0    1    3   85   10    0   85    0    3
                      94      6000 0467044500 61776   503    44    2    3   48   54  166    0    0    0    0    1
                      94      6000 0    0     0   944    53   328    2    7    0    0    0    0    0    0    0    2
                      94      6000 0    0     0     0     0     0    0    0    1    3   85   10    0   85    0    3
                      95      6000 0472044500 61776  2505   303   16   19  335  405  897    0    0    0    0    1
                      95      6000 0    0     0 14456   405  9970   19   38   60    0    0    0    0    0    0    2
                      95      6000 0    0     0     0     0     0    0    0    1    3   60   20    0   60   10    3
                      96      6000 0477044500 61776  1432   234   12   14  259  227  495    0    0   14   47    1
                      96      6000 0    0     0  8767   343  4961   19   31    0    0    0    0    0    0    0    2
                      96      6000 0    0     0     0     0     0    0    0    1    3   50   30    0   50    0    3
                      97      6000 0482044500 61776   321    51    3    3   57   69  106    0    0   21   70    1
                      97      6000 0    0     0  2001   112   806    8    5    0    0    0    0    0    0    0    2
                      97      6000 0    0     0     0     0     0    0    0    1    2   64   10    0   64    0    3
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34          DATE: 01/27/83 (83027)          PAGE      30
PDS=CN1511.ESI.PHIL37.AQALLOC.PARMS                VOL=STOR02   OPT: LN/PG=51                THOLD=10
   ------------------------------------------------------------------------------------------------------------------------------------

MEMBER NAME: MONT        (CONT)                       ALIASES: NONE

     98      6000 0487044500 61776   105    24   1   1   26  43  27    0    0    0    0    1
     98      6000 0   0    0   533    43    94   2   1    0   0   0    0    0    0    0    2
     98      6000 0487044500     0     0     0   0   0    0   0  10    8    0   10    0    3
    113      6000 0447044450 61776    16     4   0   0    4   2   6    0    0    0    0    1
    113      6000 0   0    0    69     3    21   0   1    0   1   0    0    0    0    0    2
    113      6000 0447044450     0     0     0   0   0    0   0   0   99    0    0    0    3
    114      6000 0452044450 61776   729    70   4   5   78 145 261    0    0    0    0    1
    114      6000 0   0    0  3101   116  1820  13   8    0   0   0    0    0    0    0    2
    114      6000 0   0    0     0     0     0   0   0    1   3  20   25    0   20    0    3
    115      6000 0457044450 61776   340    99   5   7  111 126 263    0    0    0    0    1
    115      6000 0   0    0  2894   155  1190  18  11   35   1   0    0    0    0    0    2
    115      6000 0   0    0     0     0     0   0   0    0   0  50   45    0   50    0    3
    116      6000 0462044450 61776   666    56   3   4   61  96 219    0    0    7   28    1
    116      6000 0   0    0  2288   122   835  17  15    0   0   0    0    0    0    0    2
    116      6000 0   0    0     0     0     0   0   1    5  10  35   45    0   35    0    3
    117      6000 0467044450 61776   441    60   3   4   67  57 134    0    0    0    0    1
    117      6000 0   0    0  1017    60   293   6   9    0   0   0    0    0    0    0    2
    117      6000 0   0    0     0     0     0   0   0    1   3  80   15    0   80    0    3
    118      6000 0472044450 61776   693   144   7   9  161 126 204    0    0    0    0    1
    118      6000 0   0    0  3274   185  1223  22  16   40   0   0    0    0    0    0    2
    118      6000 0   0    0     0     0     0   0   0    2   5  70   15    0   70   10    3
    119      6000 0477044450 61776  1048   217  13  15  244 223 356    0    0    0    0    1
    119      6000 0   0    0  4688   268  1511  80  39   30   0   0    0    0    0    0    2
    119      6000 0   0    0     0     0     0   0   0    2  10  50   23    0   50   10    3
    120      6000 0482044450 61776   893   101   6   7  114 111 258    0    0    0    0    1
    120      6000 0   0    0  3947   157  2094  41  23    0   0   0    0    0    0    0    2
    120      6000 0   0    0     0     0     0   0   0    2   3  40   50    0   40    0    3
    121      6000 0487044450 61776  2566   293  15  16  324 347 860    0    0    0    0    1
    121      6000 0   0    0 11315   602  4510  62  67   40   0   0    0    0    0    0    2
    121      6000 0   0    0     0     0     0   0   0    0   0  20   30    0   20    5    3
    122      6000 0492044450 61776   316   192   9  12  213 135 256    0    0    0    0    1
    122      6000 0   0    0  1909    48  1246  35  13   30   0   0    0    0    0    0    2
    122      6000 0492044450     0     0     0   0   0    2   3   0   20    0    0    5    3
    137      6000 0452044400 61776    61     8   0   1    9   6  20    0    0    0    0    1
    137      6000 0   0    0   316     9   219   2   1    0   1   0    0    0    0    0    2
    137      6000 0452044400     0     0     0   0   0    0   0   0    5    0    0    0    3
    138      6000 0457044400 61776   595    97   6   7  109  62 197    0    0    0    0    1
    138      6000 0   0    0  3853    76  3008   8   7   20   1   0    0    0    0    0    2
    138      6000 0   0    0     0     0     0   0   0    1   3  28   35    0   28    0    3
    139      6000 0462044400 61776  1461   200  10  14  222 208 463    0    0    0    0    1
    139      6000 0   0    0  6037   316  2426  41  37   30   1   0    0    0    0    0    2
    139      6000 0   0    0     0     0     0   0   2    5  10  20   50    0   20    0    3
    140      6000 0467044400 61776  4375   262  15  16  287 5671477    0    0    0    0    1
    140      6000 0   0    0 17710  1330  3527  13  71   80   1   0    0    0    0    0    2
    140      6000 0   0    0     0     0     0   0   0    1   3  10   45    0   10    0    3
    141      6000 0472044400 61776  2660   351  16  21  390 380 847    0    4   51  112    1
    141      6000 0   0    0 11026   781  1808  43 129    0   0   0    0    0    0    0    2
    141      6000 0   0    0     0     0     0   0   0    1   3   0   30    0    0    0    3
    142      6000 0477044400 61776  1146   214  12  15  239 195 375    0    6   76  167    1
    142      6000 0   0    0  7066   446  1891  36  69   10   0   0    0    0    0    0    2
    142      6000 0   0    0     0     0     0   0   2    5  10  40   40    0   40    5    3
   OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34       DATE: 01/27/83 (83027)        PAGE     31
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS               VOL=STCR02    CPT: LN/PG=51              THOLD=10
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MEMBER NAME: MONT      (CONT)                     ALIASES: NONE
                  143       6000 0482044400 61776 1694  263  14  17 294 257 532   0   0   0   0   1
                  143       6000 0   0    0 12263  468 6436  16 108  60   0   0   0   0   0   0   2
                  143       6000 0   0    0     0    0    0   0   0   0   0  10  45   0  10  10   3
                  144       6000 0487044400 61776 4275  515  26  34 578 6471363   0   0   0   0   1
                  144       6000 0   0    0 11044  856  756 137 143  40   0   0   0   0   0   0   2
                  144       6000 0   0    0     0    0    0   0   0   2   5   0  15   0   0  10   3
                  145       6000 0492044400 61776 1500  202  10  12 223 296 476   0   0   0   0   1
                  145       6000 0   0    0  5606  264 2252  22  62  55   0   0   0   0   0   0   2
                  145       6000 0   0    0     0    0    0   0   2   5  15   0  35   0   0   0   3
                  146       6000 0497044400 61776  323   38   2   2  41  45 101   0   0   0   0   1
                  146       6000 0   0    0   667   34  259   0   7   0   0   0   0   0   0   0   2
                  146       6000 0497044400     0    0    0   0   0   0   0   0   3   0   0   0   3
                  162       6000 0457044350 61776   90   46   2   3  51  21  29   0   0   0   0   1
                  162       6000 0   0    0  2148  127  865   6   0   0   1   0   0   0   0   0   2
                  162       6000 0457044350     0    0    0   0   0  30  60   0   5   0   0   0   3
                  163       6000 0462044350 61776  400  139   7   9 155  81 116   0   0   0   0   1
                  163       6000 0   0    0  8641  499 3344   5  29  50   1   0   0   0   0   0   2
                  163       6000 0462044350     0    0    0   0   0   2   2   0  25   0   0   0   3
                  164       6000 0467044350 61776 2973  514  27  32 571 4791015   0   0   0   0   1
                  164       6000 0   0    0 21473 1096 8653  37 169 140   1   0   0   0   0   0   2
                  164       6000 0   0    0     0    0    0   0   0  10  15   0  20   0   0  10   3
                  165       6000 0472044350 61776 2501  641  35  42 716 474 849   0   0   0   0   1
                  165       6000 0   0    0 19851  75610299  22 185 220   1   0   0   0   0   0   2
                  165       6000 0   0    0     0    0    0   0   0   5  10   0  40   0   0  10   3
                  166       6000 0477044350 61776 1177  239  14  15 267 189 363   0   0   0   0   1
                  166       6000 0   0    0  3575  226  888  34  36  50   0   0   0   0   0   0   2
                  166       6000 0   0    0     0    0    0   0   0   4  10   0  40   0   0  10   3
                  167       6000 0482044350 61776 2413  251  13  14 279 342 808   0   0   0   0   1
                  167       6000 0   0    0  9826  541 1418  65 287   0   0   0   0   0   0   0   2
                  167       6000 0   0    0     0    0    0   0   0   0   0   0  10   0   0   0   3
                  168       6000 0487044350 61776 4510  439  19  24 487 6571733   0   0   0   0   1
                  168       6000 0   0    0 22253 1822 1394 401 214  50   0   0   0   0   0   0   2
                  168       6000 0   0    0     0    0    0   0   0   0   0   0  10   0   0   0   3
                  169       6000 0492044350 61775 1142   85   3   5  94 165 408   0   0   0   0   1
                  169       6000 0   0    0  3791  227 1059  25  41  25   0   0   0   0   0   0   2
                  169       6000 0   0    0     0    0    0   0   0   3   8   0  10   0   0   0   3
                  188       6000 0467044300 61776  323  102   6   7 115  67 104   0   0   0   0   1
                  188       6000 0   0    0   617   49   58   3   5   0   0   0   0   0   0   0   2
                  188       6000 0467044300     0    0    0   0   0  10  15   0  30   0   0   0   3
                  189       6000 0472044300 61776 1473  394  23  27 443 246 538   0   0   0   0   1
                  189       6000 0   0    0  6324  557  663  31  53   0   1   0   0   0   0   0   2
                  189       6000 0   0    0     0    0    0   0   0  10  15   0  25   0   0   0   3
                  190       6000 0477044300 61776  826  134   7   9 150  87 276   0   0   0   0   1
                  190       6000 0   0    0  2315  156  522  23  20  10   1   0   0   0   0   0   2
                  190       6000 0477044300     0    0    0   0   0   3   5   0   0   0   0   0   3
                  192       6000 0487044300 61776 1022   43   2   3  47 141 352   0   0   0   0   1
                  192       6000 0   0    0  3705  318  147   1  35   0   0   0   0   0   0   0   2
                  192       6000 0487044300     0    0    0   0   0   2   1   0   2   0   0   0   3
                  193       6000 0492044300 61776  135    7   0   1   8  15  49   0   0   0   0   1
                  193       6000 0   0    0   676   51   56   0  11   0   0   0   0   0   0   0   2
                  193       6000 0492044300     0    0    0   0   0   0   0   0   1   0   0   0   3
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    OSI DATA MANAGEMENT UTILITY "PDSLIST"         VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)         PAGE      32
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                VOL=STOR02   OPT: LN/PG=51                THOLD=10
  ----------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: MONT     (CONT)                         ALIASES: NONE
                          214      6000 0472044250 61776 1754   194   10   10 214 288 709    0    0    0    0    1
                          214      6000 0    0    0 13818 1127   565  122  181  30   0   0    0    0    0    0    2
                          214      6000 0472044250     0    0     0    0    0   1   1   0    2    0    0    0    3
                          215      6000 0477044250 61776 2629   212   11   11 234 345 957    0    0    0    0    1
                          215      6000 0    0    0 21900 1303  1258  127  242   0   0   0    0    0    0    0    2
                          215      6000 0477044250     0    0     0    0    0   1   1   0   10    0    0    0    3
                          216      6000 0482044250 61776   10     1    0    0   1   3   4    0    0    0    0    1
                          216      6000 0    0    0   540   47    42    0    3 130   0   0    0    0    0    0    2
                          216      6000 0    0    0     0    0     0    0    0   0   0   0    0    0    0    0    3
           ***** END OF MEMBER 'MONT' *****                                              213 LINE(S) IN THIS MEMBER
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"         VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)        PAGE     33
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS              VOL=STOR02   OPT: LN/PG=51              THOLD=10
   -------------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: NEWCASTL                                   ALIASES: NONE
                         312      0180 0437044050 61776  206  206  21  59  59   6   0   0   0   0   0   1
                         312      0180 0   0    0    44   46   66  76  76   0   0  10  10  10  81  23   2
                         312      0180 0437044050     0    0    1   0   0   0   0   0  15   0   0   0   3
                         313      0180 0442044050 61776 1118 1125 117 199 200  21   0   0   0   0   0   1
                         313      0180 0   0    0    67   69  129 151 151   0   0  66  66  70 160  45   2
                         313      0180 0   0    0     0    0  600   0   0   5  10   0  45   0   0  15   3
                         314      0180 0447044050 61776 2595 2612 273   8   9   2   0   0   0   0   0   1
                         314      0180 0   0    0  3221 2796 2007 209 209   0   0  15  15  19 215  60   2
                         314      0180 0   0    0     0    0 3925   0   5  15  15   0  35   0   0  35   3
                         315      0180 0452044050 61776 6319 6181 702 555 611 424   0   0   0   0   0   1
                         315      0180 0   0    0  5716 5506 514523512351   0   0 104 106 1452429 667   2
                         315      0180 0   0    0     0    014850   0   0   5   5   0  30   0   0  10   3
                         316      0180 0457044050 61776 4932 5023 56712661288 150   0   0   0   0   0   1
                         316      0180 0   0    0  2228 2248 254126362640  35   1 101 102 1172724 802   2
                         316      0180 0   0    0     0    020925   0   0   0   0   0   5   0   0   0   3
                         317      0180 0462044050 61776 1058 1074 118 773 780  83   0   5   0   0   0   1
                         317      0180 0   0    0    37   37   37  40  40   0   0  25  26  31  42  11   2
                         317      0180 0462044050     0    0  817   0   0   0   0   0   5   0   0   0   3
                         340      0180 0432044000 61776   20   20   2   0   0   0   0   0   0   0   0   1
                         340      0180 0   0    0    10   10   10  47  48   0   0   1   1   1  66  10   2
                         340      0180 0432044000     0    0    1   0   0   2   2   0   5   0   0   4   3
                         341      0180 0437044000 61776  705  718  81  74  78  14   0   0   0   0   0   1
                         341      0180 0   0    0   176  181  255 524 538   0   0  30  30  31 720 124   2
                         341      0180 0   0    0     0    0 3000   0   0   5   5   0  65   0   0  10   3
                         342      0180 0442044000 61776 2276 2321 26515711572 159   0   0   0   0   0   1
                         342      0180 0   0    0   208  178  178 597 603   0   1  20  21  40 696 160   2
                         342      0180 0   0    0     0    0 1670   0   0  15  15   0  20   0   0  30   3
                         343      0180 0447044000 61776169801727819349100914 7 972   0   0   0   0   0   1
                         343      0180 0   0    0  2082 2069 256521062115   0   1 225 232 3412267 748   2
                         343      0180 0   0    0     0    010200   0   3  10  10   0  20   0   0  23   3
                         344      0180 0452044000 6177617142172841826305530 94 354   0   0   0   0   0   1
                         344      0180 0   0    0  6068 6102 658350975125  70   0 244 246 28654091774   2
                         344      0180 0   0    0     0    047220   0   0   3   3   0  15   0   0   6   3
                         345      0180 0457044000 61776 2169 2212 252 362 371  46   0  25   0   0   0   1
                         345      0180 0   0    0   456  474  72713341334  40   1 123 123 1321349 417   2
                         345      0180 0   0    0     0    0 8961   0   0   0   0   0   5   0   0   0   3
                         346      0180 0462044000 61776    0    0   0   0   0   0   0   4   0   0   0   1
                         346      0180 0   0    0     0    0    0   0   0   0   0   0   0   0   0   0   2
                         346      0180 0   0    0     0    0    1   0   0   0   0   0   0   0   0   0   3
                         369      0180 0432043950 61776 2144 2195 25517971799 182   0   0   0   0   0   1
                         369      0180 0   0    0   128  133  202 219 218   0   0  24  26  49 256  63   2
                         369      0180 0432043950     0    0 1950   0   0  20  20   0  20   0   0  40   3
                         370      0180 0437043950 61776 2215 2276 271 229 252  36   0   0   0   0   0   1
                         370      0180 0   0    0  1351 1370 161813321347   0   0  17  17  221549 364   2
                         370      0180 0   0    0     0    0 4920   0   0  10  10   0  35   0   0  20   3
                         371      0180 0442043950 61776 8373 8505 94112591275 144   0   0   5  11  12   1
                         371      0180 0   0    0  4954 5001 563629412943  40   0 778 578 2033000 898   2
                         371      0180 0   0    0     0    022160   0   0   0   0   0  10   0   0   0   3
                         372      0180 0447043950 617761826218416194964186463 701   0   0  10  58  24   1
                         372      0180 0   0    0  2535 2574 317554385439  10   119591495 61654841768   2
                         372      0180 0   0    0     0    042280   0   0   3   3   0  10   0   0   6   3
     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34          DATE: 01/27/83 (33027)          PAGE      34
   PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                    VOL=STOR02   OPT: LN/PG=51               THOLD=10
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   MEMBER NAME: NEWCASTL (CONT)                              ALIASES: NONE

                    373          0180 0452043950 617766202463538740947034747 511    0  16   5  11  12    1
                    373          0180 0    0    0 3335233872401912479248 5  40    1101910191043 2628 897   2
                    373          0180 0    0    0      0     015472    0    0    0    0    0  10  25    0    0    3
                    374          0180 0457043950 61776   88    89    9   59   59    6    0  12    0    0    0    1
                    374          0180 0    0    0      8     8    11    0    0    0    0    2    2    2    0    0    2
                    374          0180 0    0    0      0     0     1    0    0    0    0    0    0    0    0    0    3
                    393          0180 0432043900 617761418414338154365216542 679    0    0    0    0    0    1
                    393          0180 0    0    0   2413 2428 263222142242   50    0  133  143 2282739 610    2
                    393          0180 0432043900      0     016600    0    0    5    5    0   10    0    0   10    3
                    394          0180 0437043900 617761051910848131535773704 491    0    0    0    0    0    1
                    394          0180 0    0    0   4182 4238 483330563070   50    0  210  214 2663253 926    2
                    394          0180 0    0    0      0     025660    0    0    5    5    0   20    0    0    0    3
                    395          0180 0442043900 617761053310908138015391681 335    0    0   10   58   24    1
                    395          0180 0    0    0   4348 4373 469813161319   20    1  476  479 5271370 414    2
                    395          0180 0    0    0      0     034834    0    0    5    5   15   20    0    0   10    3
                    396          0180 0447043900 617761763717782188212531285 168    0    0   41  230   95    1
                    396          0180 0    0    0   2135 2152 238720532057   30    1136913691372 2112 608    2
                    396          0180 0    0    0      0     037132    0    0    3    3    0   35    5    0    6    3
                    397          0180 0452043900 61776 5298 5329  565  926  971  148    0   25    5   11   12    1
                    397          0180 0    0    0    256   264   363  702  703   25    1  428  428  431  711  202    2
                    397          0180 0    0    0      0     032140    0    0    0    0    0   15   10    0    0    3
                    398          0180 0457043900 61776     0     0    0    0    0    0    0    0    0    0    0    1
                    398          0180 0    0    0      0     0     0    0    0    0    0    0    0    0    0    0    2
                    398          0180 0    0    0      0     0     1    0    0    0    0    0    0    0    0    0    3
                    415          0180 0432043850 61776 3628 3697 41718241846 212    0    0    0    0    0    1
                    415          0180 0    0    0    647   672   980  672  677    0    0  120  121  140  745  204    2
                    415          0180 0432043850      0     014050    0    0   20   20    0   30    0    0   40    3
                    416          0180 0437043850 61776 6041 6125 66912711322 194    0    0    0    0    0    1
                    416          0180 0    0    0   1680 1696 1828  742  754    0    0  322  322  332  913  191    2
                    416          0180 0    0    0      0     013977    0    0   20   20    0   40    0    0   40    3
                    417          0180 0442043850 61776 6999 7002  702  204  221   43    0    0   10   58   24    1
                    417          0180 0    0    0   2999 3013 319710011013   40    0  396  396 3971188 272    2
                    417          0180 0    0    0      0     018160    0    0    5    5   25   50    2    0   10    3
                    418          0180 0447043850 61776 3797 3844 41610231041 126    0   20   10   58   24    1
                    418          0180 0    0    0    569   597   944  236  236   25    1  235  235  235  248   71    2
                    418          0180 0    0    0      0     0  7340    0    5    0    0    0    5   20    0    5    3
                    419          0180 0452043850 61776     0     0    0    0    0    0    0   12    5   11   12    1
                    419          0180 0    0    0      0     0     0    0    0    0    0    0    0    0    0    0    2
                    419          0180 0    0    0      0     0     1    0    0    0    0    0    0    0    0    0    3
                    437          0180 0432043800 61776 1400 1406  144  355  357   38    0    0    0    0    0    1
                    437          0180 0    0    0    447   465   697  202  203    0    0   73   73   75  215   61    2
                    437          0180 0432043800      0     012030    0    0   20   20   15   35    0    0   40    3
                    438          0180 0437043800 61776 2580 2594  260  321  331   47    0    0    0    0    0    1
                    438          0180 0    0    0    476   478   504  211  216    0    0  133  133  186  280   49    2
                    438          0180 0    0    0      0     0  9950    0    0   20   20   10   46    0    0   40    3
                    439          0180 0442043800 61776 4603 4614 46823152320 239    0    0    0    0    0    1
                    439          0180 0    0    0    112   113   137   97   98   30    1  221  221  233  119   27    2
                    439          0180 0    0    0      0     013020    0    0    3    3   10   65    5    0    6    3
                    440          0180 0447043800 61776  508   509   52  262  262   26    0   33    0    0    0    1
                    440          0180 0    0    0     49    50    65   86   86    0    1    0    0    9   83   26    2
                    440          0180 0    0    0      0     0   720    0    0    0    0    0   15   10    0    0    3
   OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34          DATE: 01/27/83 (83027)          PAGE     35
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                VOL=STORC2    OPT: LN/PG=51                THOLD=10
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MEMBER NAME: NEWCASTL (CONT)                         ALIASES: NONE
                  441      0180 0452043800 61776     0     0     0     0     0     0     0     3     0     0     0     1
                  441      0180 0    0     0         0     0     0     0     0     0     0     0     0     0     0     2
                  441      0180 0    0     0         0     0     1     0     0     0     0     0     0     0     0     0     3
                  456      0130 0432043750 61776   442   442    44    18    19     4     0    33     0     0     0     1
                  456      0130 0    0     0        26    27    47    49    49     0     1    41    41    41    53    15     2
                  456      0180 0432043750          0     0  1300     0     0     5     5    30    35     0     0    10     3
                  457      0180 0437043750 61776   660   661    66    34    36     7     0    33     0     0     0     1
                  457      0130 0    0     0        91    94   151   119   119    30     1    58    58    58   125    35     2
                  457      0130 0    0     0         0     0  4300     0     0     3     3    30    30     0     0     6     3
                  458      0180 0442043750 61776   206   210    23    43    44     5     0    30     0     0     0     1
                  458      0180 0    0     0        55    55    63    48    48     0     1     7     7     8    50    14     2
                  458      0180 0    0     0         0     0  8360     0     0     0     0    20    70     0     0     0     3
                  459      0180 0447043750 61776   328   339    42    18    18     2     0     0     0     0     0     1
                  459      0180 0    0     0       111   116   185   159   159     0     1     2     2     2   160    49     2
                  459      0180 0    0     0         0     0   324     0     5     0     0    35     5    10     0     5     3
                  460      0180 0452043750 61776     0     0     0     0     0     0     0    19     0     0     0     1
                  460      0180 0    0     0         0     0     0     0     0     0     0     0     0     0     0     2
                  460      0180 0432043700          0     0     1     0     0     0     0     0     0     0     0     0     3
                  471      0180 0432043700 61776   711   713    73    51    56    11     0     0     0     0     0     1
                  471      0180 0    0     0        37    37    45    27    27     0     0    64    64    65    28     8     2
                  471      0180 0    0     0         0     0     1     0     0     3     3    60    35     0     0     6     3
                  472      0180 0437043700 61776   706   708    72    43    47    10     0     0     0     0     0     1
                  472      0180 0    0     0        43    44    55    32    32    30     0    64    64    64    34    10     2
                  472      0180 0    0     0         0     0     1     0     0     3     3    60    35     0     0     6     3
                  473      0180 0442043700 61776    47    56    12    11    12     2     0     0     0    64    15     1
                  473      0180 0    0     0        34    36    67    30    30     0     0     0     0     1    34     9     2
                  473      0180 0    0     0         0     0     1     0     0     0     0    60    10    10     0     0     3
                  474      0180 0447043700 61776    25    32     8     0     0     0     0    11     0     0     0     1
                  474      0180 0    0     0        32    35    75    25    25     0     1     0     0     0    27     8     2
                  474      0180 0    0     0         0     0     1     0     5     0     0    20    10    25     0     5     3
                  475      0180 0452043700 61776     0     0     0     0     0     0     0     9     0     0     0     1
                  475      0130 0    0     0         0     0     0     0     0     0     0     0     0     0     0     0     2
                  475      0130 0    0     0         0     0     1     0     0     0     0     0     0     0     0     0     3
                  481      0180 0432043650 61776   194   225    45   126   135    25     0     0     0     0     0     1
                  481      0180 0    0     0        26    27    44    12    12     0     0     6     6    12    12     4     2
                  481      0180 0432043650          0     0  7670     0     0     3     3    50    40     0     0     6     3
                  482      0180 0437043650 61776  1474  1527   190   323   330    36     0     0     0     0     0     1
                  482      0130 0    0     0       579   604   923   404   408    30     1    39    39    44   494   112     2
                  482      0180 0    0     0         0     0     1     0     2     2     2    50    40     0     0     6     3
                  483      0180 0442043650 61776   226   240    34     3     3     1     0     0     0     0     0     1
                  483      0180 0    0     0       157   161   216    76    77     0     1     5     5     8   107    18     2
                  483      0180 0    0     0         0     015820     0     0     0     0    40    35    20     0     0     3
                  484      0180 0447043650 61776    44    47     7     0     0     0     0    23     0     0     0     1
                  484      0180 0    0     0        45    46    60    13    13     0     1     0     0     0    18     4     2
                  484      0180 0    0     0         0     0     1     0     5     0     0     0    10    45     0     5     3
                  485      0180 0452043650 61776     0     0     0     0     0     0     0     6     0     0     0     1
                  485      0130 0    0     0         0     0     0     0     0     0     1     0     0     0     0     0     2
                  485      0180 0    0     0         0     0     1     0     0     0     0     0     0     0     0     0     3
                  488      0180 0432043600 61776    57    63    11    24    26     5     0     0     0     0     0     1
                  488      0180 0    0     0        12    13    19    19    19     0     0     2     2     3    21     6     2
                  488      0180 0432043600          0     0     1     0     0     5     5    55    10     0     0    10     3
   OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.34       DATE: 01/27/83 (83027)          PAGE      36
 PDS=CN1511.ESI.PHIL37.AQALLOC.PARMS          VOL=STOR02   OPT: LN/PG=51              THOLD=10
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 MEMBER NAME: NEWCASTL (CONT)                      ALIASES: NONE
                   489      0180 0437043600 61776   922   923   93    9    9    1    0    0    0    0    0    1
                   489      0180 0    0     0   272   272   277  103  105   30    1   60   60   60  111   32    2
                   489      0180 0    0     0     0     0     1    0    0    5    5   50   10    0    0   10    3
                   490      0180 0442043600 61776   736   786   78    2    2    0    0    0    0    0    0    1
                   490      0180 0    0     0   293   298   298   82   82    0    0   45   45   45   91   24    2
                   490      0180 0    0     0     0     0     1    0    5    5    5   35   45    0    0   15    3
                   491      0180 0447043600 61776   127   127   12    0    0    0    0    0    0    0    0    1
                   491      0180 0    0     0    51    52    66   16   16    0    0    8    3    8   19    4    2
                   491      0180 0    0     0     0     0     1    0    5    0    0    0   10   80    0    5    3
                   492      0180 0452043600 61776    43    43    4    0    0    0    0   18    0    0    0    1
                   492      0180 0    0     0     5     5    12    5    5    0    1    4    4    4    5    1    2
                   492      0180 0    0     0     0     0     1    0    0    0    0    0    0   30    0    0    3
                   493      0180 0457043600 61776     0     0    0    0    0    0    0    3    0    0    0    1
                   493      0180 0    0     0     0     0     0    0    0    0    1    0    0    0    0    0    2
                   493      0180 0    0     0     0     0     1    0    0    0    0    0    0    0    0    0    3
                   494      0180 0432043550 61776    21    22    2    1    1    0    0    0    0    0    0    1
                   494      0180 0    0     0     7     7    11   17   17   25    0    1    1    1   18    5    2
                   494      0180 0432043550     0     0  2120    0    0   15   15    0   30    0    0   30    3
                   495      0180 0437043550 61776   168   168   17    2    2    0    0    0    0    0    0    1
                   495      0180 0    0     0    54    54    64   47   47   25    0   10   10   10   51   14    2
                   495      0180 0    0     0     0     0     1    0   10   20   20   10   38    0    0   50    3
                   496      0180 0442043550 61776   518   518   52    0    0    0    0    0    0    0    0    1
                   496      0180 0    0     0   179   132   219   71   71   10    0   29   29   29   74   22    2
                   496      0180 0    0     0     0   013190    0   10   20   20   10   38    0    0   50    3
                   497      0180 0447043550 61776   138   138   14    0    0    0    0    0    0    0    0    1
                   497      0180 0    0     0    25    27    48   18   13    0    0   12   12   12   18    5    2
                   497      0180 0    0     0     0     0     1    0    5   15   15   25   23   20    0   35    3
                   498      0180 0452043550 61776    43    43    4    0    0    0    0    0    0    0    0    1
                   498      0180 0    0     0     5     5    12    5    5    0    0    4    4    4    5    1    2
                   498      0180 0    0     0     0     0    64    0    5    0    0   15   40   25    0    5    3
                   499      0180 0432043500 61776    85    86    9    1    1    0    0    0    0    0    0    1
                   499      0180 0    0     0    31    32    43   27   27    0    0    4    4    4   29    8    2
                   499      0180 0432043500     0     0     1    0    5   20   20   10   10    0    0   45    3
                   500      0180 0437043500 61776   270   271   27    0    0    0    0    0    0    0    0    1
                   500      0180 0    0     0   101   104   136   52   52    0    0   13   13   13   55   16    2
                   500      0180 0    0     0     0     0     1    0    5   15   15   30   30    0    0   35    3
                   501      0180 0442043500 61776   384   384   30    0    0    0    0    0    0    0    0    1
                   501      0180 0    0     0   144   148   193   62   62   35    0   19   19   19   64   19    2
                   501      0180 0442043500     0     0     1    0    0   10   10   45   20    0    0   20    3
                   502      0180 0447043500 61776   206   206   21    0    0    0    0    0    0    0    0    1
                   502      0180 0    0     0    74    76   100   33   33    0    0   11   11   11   34   10    2
                   502      0180 0    0     0     0     0     1    0    5    5    5   40   10   20    0   15    3
         ***** END OF MEMBER 'NEWCASTL' *****                                      195 LINE(S) IN THIS MEMBER
   OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34         DATE: 01/27/83 (83027)          PAGE      37
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                VOL=STOR02    OPT: LN/PG=51              THOLD=10
 ----------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: PHIL                                                                                              ----------------
                                                  ALIASES: NONE
                    145      7160 0492044400 61776   50    1   0   0   1   4  20    0   0   1   2   1
                    145      7160 0    0   0    95    3   66   0   0   0   0   0    0   0   0   0   2
                    145      7160 0492044400     0    0    0   0   0   0   0   0    2   0   0   0   3
                    146      7160 0497044400 61776 2121   99   5   6 108 195 671    0   0   2   3   1
                    146      7160 0    0   0  5790  344 2060   9  25  35   0   0    0   0   0   0   2
                    146           0    0   0     0    0    0   0   0   0   0   0   10   0   0   0   3
                    147      7160 0502044400 61776   33    6   0   0   6   7   0    0   0   1   2   1
                    147      7160 0    0   0   642   50  143   0   0   0   0   0    0   0   0   0   2
                    147           0    0   0     0    0    0   0   0   0   0   0    2   0   0   0   3
                    166      7160 0477044350 61776  347   75   4   5  82 238  98    0   0   0   0   1
                    166      7160 0    0   0  1211  114    6   3   3   0   0   0    0   0   0   0   2
                    166           0477044350     0    0    0   0   0   5  10   0   10   0   0   0   3
                    167      7160 0482044350 61776 2937  165   9  11 181 5891146    0   0   0   0   1
                    167      7160 0    0   0  6892  631   78  39  40   0   0   0    0   0   0   0   2
                    167           0    0   0     0    0    0   0   0   0   0   0    0   0   0   0   3
                    168      7160 0487044350 61776  273   13   0   1  14  18 102    0   0   0   0   1
                    168      7160 0    0   0   461   43    3   0   3   0   0   0    0   0   0   0   2
                    168      7160 0    0   0     0    0    0   0   0   0   0   0    0   0   0   0   3
                    169      7160 0492044350 61776 3779  206  10  13 227 4441321    0   0   2   3   1
                    169      7160 0    0   0  6917  461  780  14 145  25   0   0    0   0   0   0   2
                    169           0492044350     0    0    0   0   0   5  10   0   10   0   0   0   3
                    170      7160 0497044350 61776 5721  380  20  24 423 6111847    0   5  20  33   1
                    170      7160 0    0   0 32045 195910130  62 219  20   0   0    0   0   0   0   2
                    170           0    0   0     0    0    0   0   0   1   3   0   30   0   0   0   3
                    171      7160 0502044350 61776 3223   69   3   4  79 124 886    0   0   2   3   1
                    171      7160 0    0   0  3387  324  307  15  33   0   0   0    0   0   0   0   2
                    171           0    0   0     0    0    0   0   0   0   0   0   10   0   0   0   3
                    190      7160 0477044300 61776 4169  162  11  11 178 8161512    0   0   0   0   1
                    190      7160 0    0   0  9709  643 2394  14  76   0   1   0    0   0   0   0   2
                    190           0477044300     0    0    0   0   0   5  10   0   20   0   0   0   3
                    191      7160 0482044300 6177611734  516  34  35 56421514599    0   0   0   0   1
                    191      7160 0    0   0 30414 2304 4860  90 215  60   1   0    0   0   0   0   2
                    191           0    0   0     0    0    0   0   0   3   5   0   15   0   0   0   3
                    192      7160 0487044300 6177614703  761  34  42 83118815636    0   0   0   0   1
                    192      7160 0    0   0 41147 2912 8602  30 317  60   0   0    0   0   0   0   2
                    192           0    0   0     0    0    0   0   0   0   0   0    5   0   0   0   3
                    193      7160 0492044300 6177615905  811  38  45 89419066047    0   0   2   3   1
                    193      7160 0    0   0 37506 3502 1974  45 221  15   0   0    0   0   0   0   2
                    193           0    0   0     0    0    0   0   0   0   0   0    5   0   0   0   3
                    194      7160 0497044300 61776 8222  463  24  30 514 7772664   15   0   2   3   1
                    194      7160 0    0   0 18057 1239 3413  16 213  35   1   0    0   0   0   0   2
                    194           0    0   0     0    0    0   0   0   3   5   0   15  10   0   0   3
                    195      7160 0502044300 61776   43   19   1   1  22  18  15    0   0   1   3   1
                    195      7160 0    0   0    91    3   45   0   2   0   0   0    0   0   0   0   2
                    195      7160 0    0   0     0    0    0   0   0   0   0   0    0   0   0   0   3
                    215      7160 0477044250 61776 3894  460  21  28 504 6961505    0   0   0   0   1
                    215      7160 0    0   0 11652 1040  629   8  53   0   0   0    0   0   0   0   2
                    215           0477044250     0    0    0   0   0   0   0   0   10   0   0   0   3
                    216      7160 0482044250 6177614033  967  49  59106913044940    0   0   0   0   1
                    216      7160 0    0   0 50146 262420004   3 172   0   1   0    0   0   0   0   2
                    216           0    0   0     0    0    0   0   0   1   3   0   15   0   0   0   3
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83.027)          PAGE      38
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                 VOL=STOR02   OPT: LN/PG=51             THOLD=10
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MEMBER NAME: PHIL      (CONT)                           ALIASES: NONE
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                       217       7160 0    0     0114939 592350806   17 459    0    0    0    0    0    0    0    2
                       217            0    0     0      0     0     0    0    0    1    3    0    5    0    0    0    3
                       218       7160 0492044250 61776 5650   757   43   51 83816372152   20    0    0    0    1
                       218       7160 0    0     0 40057 226315813   53 139   80    1    0    0    0    0    0    2
                       218            0492044250      0     0     0    0    0    1    3    0    5    0    0    0    3
                       219       7160 0497044250 61776    59    62    5    6   69  192    3   20    0    0    0    1
                       219       7160 0    0     0  1713    75   830    0    7    0    1    0    0    0    0    0    2
                       219       7160 0    0     0     0     0     0    0    0    0    0    0    0    0    0    0    3
                       240       7160 0477044200 6177618786   591   34   38 64321026875    0    0    0    0    1
                       240       7160 0    0     0 40138  3070  6437   39 271   60    0    0    0    0    0    0    2
                       240            0477044200      0     0     0    0    0    0    0    0    5    0    0    0    3
                       241       7160 0482044200 6177619237  1547   98 114171550168459   45    0    0    0    1
                       241 •     7160 0    0     033603926943544338 801127 100    1    0    0    0    0    0    2
                       241            0    0     0      0     0     0    0    0    1    3    0    5    0    0    0    3
                       242       7160 0487044200 61776 7240   928   65  73102832982911   25    0    0    0    1
                       242       7160 0    0     016923812784379l9   12 314   30    1    0    0    0    0    0    2
                       242            0    0     0      0     0     0    0    0    1    3    0    5    0    0    0    3
                       243       7160 0492044200 61776    10    14    2    2   16   78    3    7    0    0    0    1
                       243       7160 0    0     0   395    18   197    0    1    0    0    0    0    0    0    0    2
                       243       7160 0    0     0     0     0     0    0    0    0    0    0    0    0    0    0    3
                       266       7160 0477044150 61776 5544   285   19   20 31710761943   11    6   49   86    1
                       266       7160 0    0     0 16582  1036  3794    0 171   60    1    0    0    0    0    0    2
                       266            0477044150      0     0     0    0    0    0    0    0   20   10    0    0    3
                       267       7160 0482044150 6177610773   522   29   36 58112253824   45    6   49   86    1
                       267       7160 0    0     0 38805  3196  5245   10 143   90    1    0    0    0    0    0    2
                       267            0    0     0      0     0     0    0    0    0    0    0    0    5    0    0    3
                       268       7160 0487044150 61776 3611   232   18   20  260 7921275   25    0    0    0    1
                       268       7160 0    0     0 17511  1372  3459    0   26   60    1    0    0    0    0    0    2
                       268            0477044100      0     0     0    0    0    0    0    0    2    0    0    0    3
                       293       7160 0477044100 61776   152   139    9   11  178  124   57    0  138  362430    1
                       293       7160 0    0     0  3111   256   396    0   14   20    0    0    0    0    0    0    2
                       293            0    0     0      0     0     0    0    0    0    0    0   10    5    0    0    3
                       294       7160 0482044100 61776    69   174   10   12  192  224    4   25    6   49   86    1
                       294       7160 0    0     0  7017   663   327    0    5    0    1    0    0    0    0    0    2
                       294       7160 0    0     0     0     0     0    0    0    0    0    0    0    0    0    0    3
                       295       7160 0487044100 61776    19     1    1    1    1   43    1    0    0    0    0    1
                       295       7160 0    0     0  1576   156     9    0    0    0    0    0    0    0    0    0    2
                       295            0    0     0      0     0     0    0    0    0    0    0    0    0    0    0    3

         ***** END OF MEMBER 'PHIL' *****                                                    90 LINE(S) IN THIS MEMBER
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 OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34         DATE: 01/27/83 (83027)           PAGE     39
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                  VOL=STCR02   OPT: LN/PG=51             THOLD=10
 -----------------------------------------------------------------------------------------------------------------------------
MEMBER NAME: SALEM                                    ALIASES: NONE
                      345      4900 0457044000 61776  177   186 201   0  90   0   0  15   0   0   0    1
                      345      4900 0    0    0   65   23    38   3   0   0   1   0   0   0  74  26    2
                      345      4900 0457044000    43    4     0   0   0   0   0   0   5   0   0   0    3
                      346      4900 0462044000 61776  532   558 602   0 271   0   0   4   0   0   0    1
                      346      4900 0    0    0  195   70   114  10   1  30   1   0   0   0 221  79    2
                      346      4900 0    0    0  129   12     0   0   0   0   0  20   5   0   0   0    3
                      374      4900 0457043950 61776 8724 83769125    01391   0   0   7   0   0   0    1
                      374      4900 0    0    0 2264 1841   341   8  73  40   1   0   0   023441902    2
                      374      4900 0457043950   356    9     0   0   0   0   5  15  10   0   0   0    3
                      375      4900 0462043950 61776 1647 17131831    0 527   0   0   0   0   0   0    1
                      375      4900 0    0    0  349  132   188  18  10   0   0   0   0   0 392 148    2
                      375      4900 0    0    0  212   21     0   0   0   5  10  40  40   5   0  15    3
                      376      4900 0467043950 61776  489   514 562   0 228   0   0   0   0   0   0    1
                      376      4900 0    0    0  131   46    71  13   1   0   0   0   0   0 149  53    2
                      376      4900 0    0    0   81   15     0   0   0   0   5  10  10   5   0   5    3
                      397      4900 0452043900 61776 1217 12551320    0  86   0   0  15   0   0   0    1
                      397      4900 0    0    0  652  142   506   0   5   0   1   0   0   0 705 154    2
                      397      4900 0452043900   546    0     0   0   0   0   0   0   5   0   0   0    3
                      398      4900 0457043900 61776 4407 45464798    0 512   0   0   0   0   0   0    1
                      398      4900 0    0    0 1163  288   835  10  34  10   1   0   0   01263 312    2
                      398      4900 0    0    0  903   11     0   0   0   5  10  10  20  15   0  15    3
                      399      4900 0462043900 61776 2875 29733160    0 509   0   0   0   0   0   0    1
                      399      4900 0    0    0  245  100    99  19  27   0   0   0   0   0 271 110    2
                      399      4900 0    0    0  110   21     0   0   0  25  35  30  20   0   0  60    3
                      400      4900 0467043900 61776 1005 10571168    0 382   0   0   0   0   0   0    1
                      400      4900 0    0    0  142   76    30  34   2   0   0   0   0   0 160  84    2
                      400      4900 0    0    0   33   40     0   0   0   0   5  70  20   0   0   5    3
                      401      4900 0472043900 61776  817   854 935   0 286   0   0   0   0   0   0    1
                      401      4900 0    0    0  146  106    12  26   3  20   0   0   0   0 162 116    2
                      401      4900 0    0    0   13   30     0   0   0   0   5  25  10   0   0   5    3
                      402      4900 0477043900 61776  259   273 303   0  93   0   0   0   0   0   0    1
                      402      4900 0    0    0   19   10     0   9   0   0   0   0   0   0  22  11    2
                      402      4900 0    0    0    0   11     0   0   5   0   5   5  10   0   0  10    3
                      403      4900 0482043900 61776   68    72  78   0  23   0   0   0   0   0   0    1
                      403      4900 0    0    0    7    5     0   2   0   0   0   0   0   0   3   5    2
                      403      4900 0    0    0    0    2     0   0   0   0   0   0   0   0   0   0    3
                      418      4900 0447043850 61776    0     0   0   0   0   0   0   0   0   0   0    1
                      418      4900 0    0    0    0    0     0   0   0   0   1   0   0   0   0   0    2
                      418      4900 0447043850     0    0     0   0   0   0   0   0   0   5   0   0    3
                      419      4900 0452043850 61776 5325 54895773    0 378   0   0   8   0   0   0    1
                      419      4900 0    0    0 2854  622 2212   0  20   0   1   0   0   03082 672    2
                      419      4900 0452043850  2309    0     0   0   0   5  10   0  15  10   0  15    3
                      420      4900 0457043850 61776 2941 30333192    0 304   0   0   0   0   0   0    1
                      420      4900 0    0    0 1550  327 1217   6  10   0   1   0   0   01686 353    2
                      420      4900 0    0    0 1315    7     0   0   0   0   5   0   0  20   0   5    3
                      421      4900 0462043850 61776  548   589 625   0 308   0   0   0   0   0   0    1
                      421      4900 0    0    0  258   19   221  17   0   0   0   0   0   0 233  21    2
                      421      4900 0    0    0  244   18     0   0   0   5   5  80  10   0   0  10    3
                      422      4900 0467043850 61776 1770 10331967    0 631   0   0   0   0   0   0    1
                      422      4900 0    0    0  545  335   136  43  11  20   0   0   0   0 597 307    2
                      422      4900 0    0    0  149   48     0   0   0   5   5  70  15   0   0  10    3
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    OSI DATA MANAGEMENT UTILITY "PDSLIST"        VER 3-4     TIME:  16.49.34        DATE: 01/27/83 (83027)        PAGE     40
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS              VOL=STOR02   OPT: LN/PG=51              THOLD=10
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MEMBER NAME: SALEM    (CONT)                     ALIASES: NONE
                 423      4900 0472043850 61776 2579 26802893   0 864    0   0   0   0   0   0    1
                 423      4900 0    0     0   644  502   58  68  16  20    1   0   0   0 706 549    2
                 423      4900 0    0     0    63   77    0   0   0   0    5  70  20   0   0   5    3
                 424      4900 0477043850 61776  839  881 963   0 289    0   0   0   0   0   0    1
                 424      4900 0    0     0    76   48    1  25   2   0    0   0   0   0  85  56    2
                 424      4900 0    0     0     1   29    0   0   5   0    5  65  20   0   0  10    3
                 425      4900 0482043850 61776  682  715 783   0 230    0   0   0   0   0   0    1
                 425      4900 0    0     0    67   46    1  19   2  15    0   0   0   0  78  52    2
                 425      4900 0    0     0     1   21    0   0  10   0    5  45  10   0   0  15    3
                 426      4900 0487043850 61776  102  107 117   0  34    0   0   0   0   0   0    1
                 426      4900 0    0     0    10    7    0   3   0   0    0   0   0   0  12   6    2
                 426      4900 0    0     0     0    3    0   0   0   0    5  10   0   0   0   5    3
                 441      4900 0452043800 61776 2282 23532474   0 162    0   0   6   0   0   0    1
                 441      4900 0    0     0  1223  267  948   0   9   0    1   0   0   01321 288    2
                 441      4900 0452043800  1024    0    0   0   0   0    0   0   5  50   0   0    3
                 442      4900 0457043800 61776 6320 64316638   0 840    0   0   0   0  25   0    1
                 442      4900 0    0     0  4417 1677 1594  551091  20    1   0   0   046041738    2
                 442      4900 0    0     0  1635   57    0   0   0   0    0   0  10  20   0   0    3
                 443      4900 0462043800 61776  686  713 762   0 344    0   0   0   0  25   0    1
                 443      4900 0    0     0   232   27  190  15   0  30    0   0   0   0 256  30    2
                 443      4900 0    0     0   209   16    0   0   0   5    5  75  15   0   0  10    3
                 444      4900 0467043800 61776  547  572 619   0 237    0   0   0   0   0   0    1
                 444      4900 0    0     0    79   26   48   5   0  40    1   0   0   0  88  29    2
                 444      4900 0    0     0    53    6    0   0   0  20   15  35  25   0   0  35    3
                 445      4900 0472043800 61776  684  719 788   0 264    0   0   0   0   0   0    1
                 445      4900 0    0     0    43   31    1  11   1   0    0   0   0   0  50  36    2
                 445      4900 0    0     0     1   12    0   0   0  15   10  45  25   0   0  25    3
                 446      4900 0477043800 61776  994 10431141   0 344    0   0   0   0   0   0    1
                 446      4900 0    0     0    92   64    1  24   3   0    1   0   0   0 106  74    2
                 446      4900 0    0     0     1   27    0   0   0   0    5  65  25   0   0   5    3
                 447      4900 0482043800 61776 2718 28143010    01360    0   0   0   0   0   0    1
                 447      4900 0    0     0  1140  788  218  74  60  30    1   0   0   01233 350    2
                 447      4900 0    0     0   237   81    0   0  15   0    5  45  20   0   0  20    3
                 448      4900 0487043800 61776  972 10311142   0 222    0   0   0   0   0   0    1
                 448      4900 0    0     0   121   64   41  12   4   0    0   0   0   0 142  75    2
                 448      4900 0    0     0    49   14    0   0  25   5    5  15  15   0   0  35    3
                 449      4900 0492043800 61776  177  188 209   0  35    0   0   0   0   0   0    1
                 449      4900 0    0     0    23   12    9   2   1   0    0   0   0   0  27  14    2
                 449      4900 0    0     0    11    2    0   0   5   0    5   0   0   5   0  10    3
                 460      4900 0452043750 61776  313  325 350   0 280    0   0  20   0   0   0    1
                 460      4900 0    0     0    13   13    0   0   0   0    0   0   0   0  14  14    2
                 460      4900 0452043750     0    0    0   0   0   0    5  10  10  10   0   5    3
                 461      4900 0457043750 61776 4470 45494710    01154    0   0   0   0  25   0    1
                 461      4900 0    0     0  2394 1239  619 148 837   0    0   0   0   029991201    2
                 461      4900 0    0     0   638  157    0   0   0   5    5  25  35  15   0  10    3
                 462      4900 0462043750 61776 1118 11661268   0 475    0   0   0   0  25   0    1
                 462      4900 0    0     0   194   63   17 110   0   0    0   0   0   0 223  76    2
                 462      4900 0    0     0    19  127    0   0   0  10    5  45  30   5   0  15    3
                 463      4900 0467043750 61776  353  892 970   0 340    0   0   0   0   0   0    1
                 463      4900 0    0     0    50   47    1   1   0   0    1   0   0   0  57  33    2
                 463      4900 0    0     0     1    2    0   0   0  40    0  25  25   0   0  40    3
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     OSI DATA MANAGEMENT UTILITY "PDSLIST"          VER 3-4     TIME:  16.49.34         DATE: 01/27/88 (88027)          PAGE     41
PDS=CN1511.ESI.PHIL87.AQALLOC.PARMS                 VOL=STOR02   OPT: LN/PG=51               THOLD=10
   ------------------------------------------------------------------------------------------------------------------------------

MEMBER NAME: SALEM     (CONT)                             ALIASES: NONE
                                 464        4930 0472043750 61776   709    744 809    0 285    0    0    0    0    0    0    1
                                 464        4900 0   0    0    40    36      1   3    1   0    0    0    0    0   45   41    2
                                 464        4900 0   0    0     1     3      0   0    5  30    5   25   30    0    0   40    3
                                 465        4900 0477043750 61776   504    530 580    0 172    0    0    0    0    0    0    1
                                 465        4900 0   0    0    42    29      7   5    1   0    0    0    0    0   46   33    2
                                 465        4900 0   0    0     6     6      0   0    5   0    5   25   10    0    0   10    3
                                 466        4900 0482043750 61776  1180   12561396    0 236    0    0    0    0    0    0    1
                                 466        4900 0   0    0   155    77     63  10    5  30    1    0    0    0  183   91    2
                                 466        4900 0   0    0    74    12      0   0   15   5    5   25   30    0    0   25    3
                                 467        4900 0487043750 61776  1475   15701745    0 295    0    0    0    0    0    0    1
                                 467        4900 0   0    0   194    96     79  13    6   0    0    0    0    0  229  114    2
                                 467        4900 0   0    0    93    15      0   0   25  15   15   20   20    0    0   55    3
                                 468        4900 0492043750 61776   413    440 489    0  83    0    0    0    0    0    0    1
                                 468        4900 0   0    0    54    27     22   4    2   0    1    0    0    0   64   32    2
                                 468        4900 0   0    0    26     4      0   0   15   5    5   10    0    5    0   25    3
                                 475        4900 0452043700 61776   229    239 260    0 192    0    0   20    0    0    0    1
                                 475        4900 0   0    0   121    12      0 103    0   0    1    0    0    0  140   14    2
                                 475        4900 0452043700     0   126      0   0    0   0    0    0    5   25    0    0    3
                                 476        4900 0457043700 61776   440    463 506    0 344    0    0    0    0    0    0    1
                                 476        4900 0   0    0   464    31      0 434    0   0    1    0    0    0  533   35    2
                                 476        4900 0   0    0     0   503      0   0    0   0    5   10   20   25    0    5    3
                                 477        4900 0462043700 61776   458    432 528    0 288    0    0    0    0    0    0    1
                                 477        4900 0   0    0   468    34      0 434    0   0    1    0    0    0  542   39    2
                                 477        4900 0   0    0     0   503      0   0    0  15    0   40   20    0    0   15    3
                                 478        4900 0467043700 61776   935    9751062    0 397    0    0    0    0    0    0    1
                                 478        4900 0   0    0   167    58      1 108    0   0    1    0    0    0  193   65    2
                                 478        4900 0   0    0     1   126      0   0   15  45   20   10   10    0    0   30    3
                                 479        4900 0472043700 61776   369    387 420    0 148    0    0    0    0    0    0    1
                                 479        4900 0   0    0    21    19      0   1    0   0    0    0    0    0   24   22    2
                                 479        4900 0   0    0     0     1      0   0    0   5    0   25    5    0    0    5    3
                                 480        4900 0487043700 61776  1180   12561396    0 236    0    0    0    0    0    0    1
                                 480        4900 0   0    0   155    77     63  10    5   0    0    0    0    0  183   91    2
                                 480        4900 0   0    0    74    12      0   0   20   5    5   20   15   10    0   30    3
                                 485        4930 0452043650 61776    79     83  92    0  58    0    0   15    0    0    0    1
                                 485        4900 0   0    0   115     6      0 103    0   0    1    0    0    0  133    7    2
                                 485        4900 0452043650     0   126      0   0    0   0    0    0    5   20    0    0    3
                                 486        4900 0457043650 61776   315    333 [illegible]    0 232    0    0    0    0    0    0    1
                                 486        4900 0   0    0   459    26      0 434    0   0    1    0    0    0  533   30    2
                                 486        4900 0   0    0     0   503      0   0    0   0    5    0    5   40    0    5    3
                                 487        4900 0462043650 61776   205    217 [illegible]    0 151    0    0    0    0    0    0    1
                                 487        4900 0   0    0   293    17      0 282    0   0    0    0    0    0  346   19    2
                                 487        4900 0   0    0     0   327      0   0    0   5    0   25   15   20    0    5    3
                                 492        4900 0452043600 61776     0      0   0    0   0    0    0   17    0    0    0    1
                                 492        4900 0   0    0     0     0      0   0    0   0    1    0    0    0    0    0    2
                                 492        4900 0   0    0     0     0      0   0    0   0    0    0    0   50    0    0    3
                                 493        4900 0457043600 61776    31     33  37    0  23    0    0   10    0    0    0    1
                                 493        4900 0   0    0    43     3      0  43    0   0    1    0    0    0   53    3    2
                                 493        4900 0457043600     0    50      0   0    0   0    0    0    0   15    0    0    3

      ***** END OF MEMBER 'SALEM' *****                                                          153 LINE(S) IN THIS MEMBER
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APPENDIX C

CLASSIFICATION OF SCC-SIC COMBINATIONS FOR VOC SUMMARIES

This appendix includes the SCC-SIC combinations used to classify VOC emissions into the categories of Tables 1.1 and 1.2. Emissions were classified first by SCC, SIC, and finally, by comments in the inventory.

STORAGE, TRANSPORTATION, AND MARKETING OF VOC

Gasoline and Crude Oil Storage

39999999 - 2911
40300101 - 2911, 3712, 9711
40300103 - 2911, 9711
40300104 - 2911, 5172
40300106 - 5092
40300107 - 2821, 2911, 4226, 5092
40300150 - 2911
40300151 - 2911
40300152 - 2816, 2818, 2821, 2869, 2911, 2999, 4911, 5172
40300161
40300199 - 2816, 2911, 4613
40300201 - 2911, 2999, 5092
40300203 - 2911, 4613, 5161
40300204 - 5161
40300205 - 9711
40300206 - 2911, 5096
40300207 - 2911, 5092
40300208 - 2911
40300216 - 2911
40300299 - 2911
40300302 - 2911, 2992, 3296
40300399 - 4911
40301099 - 2911, 4911
40301102 - 2911
40301109 - 2911
40301198 - 2911
40301199 - 2911
40301299 - 2911
40399999 - 2816, 2821, 2911, 4226, 4911, 9711
40400101 - 5092
40600304 - 2869

Synthetic Organic Chemical Storage and Transfer

39999999 - 2911
40200904 - 2851
40200920 - 2851
40299999 - 2851
40300101 - 2869
40300108 - 2911
40300153 - 2911
40300161 - 2911
40300198 - 2818
40300199 - 2819, 2821, 2911

Synthetic Organic Chemical Storage and Transfer (Continued)

40300208 - 2818, 2865, 2911
40300216 - 2911
40300299 - 2911
40300312 - 2821
40300398 - 5172
40300399 - 2821, 2911
40301099 - 3996
40399999 - 2033, 2865, 3599, 7399
40400199 - 2816, 2851, 2869, 2911, 5171, 7399
40400999
49000105 - 3079
49000199 - 3079
49099999 - 2992, 3996

Ship and Barge Transfer of VOC

40600240
40600253

Bulk Gasoline Terminals

40300152 - 5983
40300202 - 5983
40301099 - 2911
40301199 - 4613
40302001 - 2911
40399999 - 4226
40600101 - 2992
40600105
40600126
40600127 - 5161
40600130
40600131 - 2911, 5171
40600135 - 2911
40600140 - 5983
40600197 - 5171
40600198 - 5092
40600401 - 5171

Gasoline Bulk Plants

40300101 - 5171
40300103 - 5171
40300106 - 5171
40300107 - 5171
40300116 - 5171

Gasoline Bulk Plants (Continued)

40300150 - 5171, 5172
40300151 - 5171
40300152 - 5171
40300198 - 5171
40300201 - 5171
40300202 - 5171
40300211 - 5171
40300212 - 5171
40300299 - 5171
40300302 - 5171
40301019 - 5171
40301199 - 5171
40399999 - 5171
40400112 - 5171
40400199 - 5171
40600105
40600126 - 5171

INDUSTRIAL PROCESSES

Petroleum Refineries

30199999 - 2911
30600101
30600102
30600103
30600104
30600201
30600301
30600401
30600402
30600501
30600502
30600503
30600504
30600602
30600603
30600701
30600702
30600801
30600802
30600803
30600804
30600805
30600806

Petroleum Refineries (Continued)

30600807
30600999
30601101
30601201
30601599
30699998
30699999
39000499

Lube Oil Manufacture

30199999 - 2922

Organic Chemical Manufacture

30100701 - 2865
30101401 - 3996
30101899 - 2865
30102399 - 2819
30103401 - 2818
30109099 - 2819
30109101 - 2869
30111000 - 2818
30111001 - 2869
30125099 - 2869
30125801 - 2865
30125899 - 2865
30128501 - 2865
30113299 - 2818
30190099 - 2869
30199999 - 2818, 2819, 2865, 2869, 2892
39999999 - 2865
49099999 - 2865

Inorganic Chemical Manufacture

30100901 - 2812
30101199 - 2819
30101301 - 2819
30101306 - 2818
30101399 - 2818
30101499 - 2816
30101903 - 2818
30102099 - 2816
30102399 - 2819
30103599 - 2815, 2869

Inorganic Chemical Manufacture (Continued)

30199999 - 2813, 2815, 2816, 2818, 2819
30599999 - 2816
39000499 - 2816, 2819
39000699 - 2816

Pharmaceutical Manufacture

30106099 - 2834
30199999 - 2834
39999999 - 2834

Plastic Products Manufacture

30101801
30101802
30101805
30101812
30101899
30199999
30700899 - 3099
32099999

Rubber Tire Manufacture

30101801 - 3011
30101899 - 3011
30102620
30800107 - 3011
30800197 - 3011
30800198 - 3011
30800199 - 3011

SBR Rubber Manufacture

30102699
33000299
49099999 - 3069

Textile Polymers and Resin Manufacture

30100799 - 2821
30101499 - 2821
30101801 - 2821
30101802 - 2821, 3996
30101805 - 2821
30101822 - 2821

Textile Polymers and Resin Manufacture (Continued)

30101891 - 2821
30113799 - 2821
30190099 - 2821
30199999 - 2821
39000499 - 2821
39999999 - 2821
49099999 - 2821

Synthetic Fiber Manufacture

30102404 - 2869
30501205
33000199 - 2211
33000203 - 3079

Iron and Steel Manufacture

30300301 - 3312
30300302 - 3311, 3312
30300303 - 3312
30300306 - 3311
30300308 - 3312
30300807
30300808 - 3312
30300813 - 3312
30300899
30300901
30300902
30300903
30300911
30300920
30300933 - 3312
30300934 - 3312
30300999
30400301 - 3312, 3322
30400302
30400330
30400399
30400402 - 2869
30400499 - 2869
30400501 - 2869
30400704
30400799
30900199 - 3461

CLASSIFICATION OF SCC-SIC CATEGORIES FOR VOC SUMMARIES

Industrial Process - Others

30100901 - 2841
30101002 - 2892
30101401 - 2851, 2899
30101499 - 2851, 2899
30101501 - 2851
30101599 - 2851
30103399
30105001
30111102
30199999 - 2821, 2879, 2892, 2899, 7391
30200202
30200504
30200754 - 2046
30201203
30201501
30299998
30300934 - 3511
30400101
30400103
30400199
30400201
30400203
30400205
30400305
30400401
30400402
30400805
30400806
30400807
30400899
30499999 - 3341, 3362, 3613, 9311
30500102
30500104
30500199
30500201
30500311 - 3297
30500312 - 3297
30500399
30500501
30500504
30500599
30500801
30500899
30501203 - 3296
30501204 - 3231
30501205 - 3231, 3296

Industrial Process - Others (Continued)

30501299 - 3296
30501401
30501402 - 3221
30501410 - 2819
30501414 - 2819
30501499
30501501 - 3275
30501503
30501599
30501603
30501604
30501699
30504033 - 3274
30599999 - 1011, 3253, 3292, 3295
30601613 - 3996
30700401 - 2621
30702099
30799999
30800699 - 2641
30901099
30902099 - 3411, 3461
30999999 - 2031, 3398
33000299 - 2851
33000399
39000431
39000499 - 2061, 2085, 2879, 2899, 3291, 3399, 4911
39000508 - 3211
39000531
39000599 - 2051, 3291, 3297, 3399, 4911, 5085, 5171, 3465
39000699 - 2032, 2052, 2514, 2721, 2751, 3291, 3292, 3362, 3444, 3446, 3452, 3495, 3562, 3629, 3639, 3648, 3714, 4925, 5085, 8062, 8221
39000899 - 4911
39001099 - 2499
39099997 - 3341
39999999 - 3429, 3432, 3461, 3714, 5093, 7391
49099999 - 2851

INDUSTRIAL SURFACE COATING

Large Appliances

40200101 - 3639

CLASSIFICATION OF SCC-SIC CATEGORIES FOR VOC SUMMARIES

Automobile

40200101 - 3429, 3465, 3537, 3711, 3712, 3713
40200301 - 3411
40200399 - 3429
40200401 - 3429
40200406 - 3499
40200501 - 3713
40200503 - 3429
40200601 - 3712
40200801 - 3465, 3712, 3714
40299999 - 3711

Cans

40200101 - 2033, 3411, 3412
40200199 - 3411
40200401 - 3411, 4121
40200501 - 2032, 2655, 3411
40200801 - 2032, 2655, 3411
40200802 - 2033, 3411
40200803 - 3411
40200899 - 2032
40200901 - 3411
40201726 - 3411
40201727 - 3411
40201799 - 3411
40202501 - 3411
40299999 - 3411
49099999 - 2032

Metal Coils

40200101 - 3479
40200401 - 3479
40200501 - 3479
40200803 - 3479
40299999 - 3479
49099999 - 2514

Paper

40200101 - 2649, 2655
40200199 - 2641
40200401 - 2631, 2641, 2653, 2751, 2752
40200404 - 2751
40200701 - 2641
40200706 - 2641

Paper (Continued)

40200801 - 2641
40200803 - 2641, 2655
40200902 - 2649
40200922 - 2641
40299999 - 2641, 2731, 2752
40500511 - 2651
49000199 - 2641

Fabric

33000199 - 3079
40200921 - 2295, 3069
40200922 - 3069
40201101 - 2295
40299999 - 2262

Metal Wood Products

30700799 - 2435
30702099 - 2521
40200101 - 2441, 2491, 2499, 2514, 2522, 2542
40200299 - 2435
40200401 - 2431, 2435, 2512, 2515, 2541, 2599
40200499 - 2435
40200501 - 2514
40200699 - 2435
40200701 - 2542
40200801 - 2514, 2521, 2522
40200803 - 2542
40202103 - 2521
40299999 - 2511, 2514, 2522, 2541, 2542
40500501 - 2431

Miscellaneous Metal Products

40200101 - 3317, 3352, 3356, 3361, 3399, 3429, 3443, 3444, 3446,
3469, 3489, 3511, 3536, 3585, 3613, 3629, 3743, 3829
40200110 - 3715
40200301 - 3612, 3613
40200399 - 3694
40200401 - 3369, 3471, 3496, 3499, 3613
40200406 - 3499, 3694
40200501 - 3442, 3444, 3446, 3489, 3496, 3499, 3559, 3566, 3612,
3613, 3714, 3743
40200510 - 3715
40200599 - 3352

Miscellaneous Metal Products (Continued)

40200601 - 3398, 3446, 3613, 3714
40200801 - 3444, 3469, 3714, 3715
40200802 - 3743
40200899
40200901 - 3629
40200918 - 3357
40299999 - 3429, 3444, 3446, 3469, 3489, 3497, 3499, 3585, 3624, 3629
40301020 - 3312

Plastic Parts Painting

40200101 - 3079
40200801 - 3079
40200803 - 3079
40200901 - 3069
40200998 - 2821
40201101 - 3079
40201301 - 3079
40299999 - 2821

Large Ships

40200101 - 3731
40202301 - 3731
40202306 - 3731

Large Aircraft

40200101 - 3721
40202401 - 3721
40202406 - 3721

Industrial Surface Coating - Others

40200101 - 2818, 2819, 2911, 3269, 3292, 3299, 3599, 3648, 3679, 3993, 3995, 3999, 4311, 4911, 4925, 5085, 5311, 9711
40200105 - 3841
40200199 - 3461, 3841
40200401 - 3221, 3281, 3292, 3589, 3641, 3648, 3941, 3944, 3993, 3995, 5072, 7319
40200501 - 3642, 3949, 3993, 4953
40200801 - 2821, 3579, 3642, 3996, 3999, 5085
40200803 - 3996
40200898 - 3996
40200901 - 3999

Industrial Surface Coating - Others (Continued)

40200917 - 2869
40200921 - 7534
40299999 - 3811, 7391, 7534
40200598 - 3996
49099999 - 3292

NON-INDUSTRIAL SURFACE COATING

Auto Refinishing

40200101 - 7531, 7535, 7538
40200501 - 7535

OTHER SOLVENT USE

Degreasing

40100201
40100202
40100203
40100204
40100205
40100299
40199999

Drycleaning

40100101
40100102
40100105

Graphic Arts

40201301 - 2751
40500101
40500201
40500301
40500304
40500306
40500401
40500499
40500501
40500506
40500511 - 2751, 2754
40500599 - 7391
49099999 - 2751, 2752, 2753

OTHER MISCELLANEOUS SOURCES

Fuel Combustion

1 XX XXX XX

Solid Waste Disposal

39000699 - 4953
50100101
50100102
50100505
50100506 - 4953
50200101
50200505
50300101
50300103
50300106
50300202
50300506
50300599

Stationary Internal Combustion Engines

2 XX XXX XX

APPENDIX D

VOC/NO_x PROFILES

Appendix D contains the VOC/NO_x factor file for both point and area sources. Each profile is listed in order according to SCC with the exception of a few point sources which are arranged according to their EIS/P&R identification codes.

The following sequence is used for all lines:[a]

1. State (cc 2 and 3), county (cc 4-7), plant (cc 8-11), and emission point (cc 12 and 13) for some point sources and SCC - eight digit in card columns (cc) 6 through 13 for all others
2. Pollutant Code - HC (VOC) or NX (NO_x) in cc 19 and 20

For VOC, the sequence is:

3. Paraffins - the first number is the % by weight of total emissions (cc 21-25), and the second number is the average molecular weight of this class (cc 26-30)
4. Olefins - % wt. (cc 31-35) and avg. M.W. (cc 36-40)
5. Aromatics - % wt. (cc 41-45) and avg. M.W. (cc 46-50)
6. Carbonyls - % wt. (cc 51-55) and avg. M.W. (cc 56-60)
7. Ethylene - % wt. (cc 61-65)
8. Diolefins - % wt. (cc 71-75) and avg. M.W. (cc 76-80)
9. Alcohols - % wt. (cc 81-85) and avg. M.W. (cc 86-90)
10. Acetates - % wt. (cc 91-95) and avg. M.W. (96-100)
11. Methane - % wt. (cc 101-105)
12. Other - % wt. (cc 111-115) and avg. M.W. (cc 116-120)
13. Aldehydes - % wt. (cc 121-125)

For NO_x, the sequence is:

3. Nitric Oxide - % as NO_2, on weight basis (cc 21-25)
4. Nitrogen Dioxide - % wt. (cc 31-35)

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[a] Decimal points are indicated by carats in the card column indicator on the first page of the file.

```
123456789A123456789B123456789C123456789D123456789E123456789F123456789G123456789H123456789A123456789B123456789C123456789D12345
                        ▲    ▲    ▲    ▲    ▲    ▲    ▲    ▲    ▲         ▲    ▲    ▲    ▲    ▲    ▲    ▲         ▲    ▲   ▲
K394900016101 1   HC    0          0          0          0          0      0      0      0      0     106 1374    0
K394900016102 1   HC    0          0          0          0          0      0      0      0      0     106 1374    0
K394900016241 1   NX   98          2
K394900016242 1   NX   98          2
K394900016382 1   NX   98          2
K394900016749 1   HC    0         89  316     0          0         59      0      0      0    733     178  266
K394900016752 1   HC    0         89  316     0          0         59      0      0      0    733     178  266
K394900016753 1   HC    0         89  316     0          0         59      0      0      0    733     178  266
K394900016772 1   HC    0         89  316     0          0         59      0      0      0    733     178  266
K394900016774 1   HC    0         89  316     0          0         59      0      0      0    733     178  266
K394900016775 1   HC    0         89  316     0          0         59      0      0      0    733     178  266
K397160155115 1   HC    0          0          0       1000  581     0      0      0      0      0       0          0
P     10100201 1   HC  148  646    90  750    50 1250  100  833     0      0      0      0    486     126  278
P     10100201 1   NX   94          6
P     10100202 1   HC  148  646    90  750    50 1250  100  833     0      0      0      0    486     126  278
P     10100202 1   NX   94          6
P     10100401 1   HC  190  636     0          0        700  372     0      0      0      0    110       0        420
P     10100401 1   NX   98          2
P     10100402 1   HC  190  636     0          0        700  372     0      0      0      0    110       0        420
P     10100402 1   NX   98          2
P     10100404 1   HC  190  636     0          0        700  372     0      0      0      0    110       0        420
P     10100404 1   NX   98          2
P     10100501 1   HC  513  728     0          0        487  300     0      0      0      0      0       0        487
P     10100501 1   NX   98          2
P     10100502 1   NX   98          2
P     10100503 1   NX   98          2
P     10100603 1   NX   95          5
P     10100801 1   HC    0        120  283     0          0        117      0      0      0    828      52  375    0
P     10100801 1   NX   95          5
P     10200101 1   HC  148  646    90  750    50 1250  100  833     0      0      0      0    486     126  278
P     10200102 1   NX   94          6
P     10200104 1   HC  148  646    90  750    50 1250  100  833     0      0      0      0    486     126  278
P     10200104 1   NX   94          6
P     10200107 1   HC  148  646    90  750    50 1250  100  833     0      0      0      0    486     126  278
P     10200107 1   NX   94          6
P     10200201 1   HC  148  646    90  750    50 1250  100  833     0      0      0      0    486     126  278
P     10200201 1   NX   98          2
P     10200202 1   HC  148  646    90  750    50 1250  100  833     0      0      0      0    486     126  278
P     10200202 1   NX   94          6
P     10200401 1   HC  190  636     0          0        700  372     0      0      0      0    110       0        420
P     10200401 1   NX   98          2
P     10200402 1   HC  190  636     0          0        700  372     0      0      0      0    110       0        420
P     10200402 1   NX   98          2
P     10200403 1   HC  190  636     0          0        700  372     0      0      0      0    110       0        420
P     10200403 1   NX   98          2
P     10200404 1   NX   98          2
P     10200501 1   HC  513  728     0          0        487  300     0      0      0      0      0       0        487
P     10200501 1   NX   98          2
P     10200502 1   HC  513  728     0          0        487  300     0      0      0      0      0       0        487
P     10200502 1   NX   98          2
P     10200503 1   HC  513  728     0          0        487  300     0      0      0      0      0       0        487
P     10200503 1   NX   98          2
P     10200504 1   HC  513  728     0          0        487  300     0      0      0      0      0       0        487
P     10200504 1   NX   98          2
P     10200601 1   HC  300  629     0         20  921   80  300     0      0      0      0    560      40  781   80
P     10200601 1   NX   94          6
P     10200602 1   HC  300  629     0         20  921   80  300     0      0      0      0    560      40  781   80
P     10200602 1   NX   94          6
P     10200603 1   HC  300  629     0         20  921   80  300     0      0      0      0    560      40  781   80
P     10200603 1   NX   94          6
```

```
P   10200702 1  HC   464   514   175   421     0           76   300     0     0           0           0          76   209   301    76
P   10200702 1  NX    94           6
P   10200704 1  HC   464   514   175   421     0           76   300     0     0           0           0          76   209   301    76
P   10200704 1  NX    94           6
P   10200707 1  HC     0         120   283     0            0         117     0           0           0         828    52   375     0
P   10200707 1  NX    94           6
P   10200708 1  HC     0         120   283     0            0         117     0           0           0         828    52   375     0
P   10200708 1  NX    94           6
P   10200799 1  HC   464   514   175   421     0           76   300     0     0           0           0          76   209   301    76
P   10200799 1  NX    94           6
P   10201302 1  HC   190   636     0           0          700   372     0     0           0           0         110     0         420
P   10201302 1  NX    94           6
P   10299997 1  NX    94           6
P   10299998 1  HC   464   514   175   421     0           76   300     0     0           0           0          76   209   301    76
P   10299998 1  NX    94           6
P   10299999 1  NX    94           6
P   10300102 1  NX    94           6
P   10300106 1  NX    94           6
P   10300107 1  HC   148   646    90   750    50  1250   100   833     0     0           0           0         436   126   278
P   10300107 1  NX    94           6
P   10300108 1  NX    94           6
P   10300109 1  HC   148   646    90   750    50  1250   100   833     0     0           0           0         486   126   278
P   10300109 1  NX    94           6
P   10300110 1  NX    94           6
P   10300199 1  HC   148   646    90   750    50  1250   100   833     0     0           0           0         486   126   278
P   10300199 1  NX    94           6
P   10300401 1  HC   190   636     0           0          700   372     0     0           0           0         110     0         420
P   10300401 1  NX    98           2
P   10300402 1  HC   190   636     0           0          700   372     0     0           0           0         110     0         420
P   10300402 1  NX    98           2
P   10300403 1  HC   190   636     0           0          700   372     0     0           0           0         110     0         420
P   10300403 1  NX    98           2
P   10300501 1  NX    98           2
P   10300502 1  HC   513   728     0           0          487   300     0     0           0           0           0     0         487
P   10300502 1  NX    98           2
P   10300503 1  HC   513   728     0           0          487   300     0     0           0           0           0     0         487
P   10300503 1  NX    98           2
P   10300602 1  HC   300   629     0          20   921    80   300     0     0           0           0         560    40   731    80
P   10300602 1  NX    85          15
P   10300603 1  NX    85          15
P   10500105 1  HC   513   728     0           0          487   300     0     0           0           0           0     0         487
P   10500105 1  NX    98           2
P   10500501 1  HC   513   728     0           0          487   300     0     0           0           0           0     0         487
P   10500501 1  NX    95           5
P   19999999 1  HC    48   630   439   361   101  1065    32   302   219     0         112   413    68  1001     0   257   610    32
P   19999999 1  NX    94           6
P   20100101 1  HC     0         634   368     0            0         287    70   541     0           0         116   220   350     0
P   20100101 1  NX    97           3
P   20100102 1  NX    97           3
P   20100201 1  HC     0           0           0          300   300     0     0           0           0         700     0         300
P   20100201 1  NX    94           6
P   20100501 1  HC     0         664   368     0            0         287    70   541     0           0         116   220   350     0
P   20100501 1  NX    98           2
P   20200101 1  HC     0         664   368     0            0         287    70   541     0           0         116   220   350     0
P   20200101 1  NX    90          10
P   20200201 1  HC     0           0           0          300   300     0     0           0           0         700     0         300
P   20200201 1  NX    94           6
P   20200202 1  NX    94           6
P   20400499 1  HC     0           0           0          300   300     0     0           0           0         700     0         300
P   20400499 1  NX    94           6
```

```
P   30100699 1   HC  454  850   255  311    00   00    00   00  191      05  541       0          0           93     193  283    0
P   30100701 1   HC    0          0          0          0         0       0            0          0            0    1000  990    0
P   30100799 1   HC   48  630   439  361   101 1065    32  382  219       0          112  413    08 1001       0     257  610   32
P   30100901 1   HC    0          0          0          0         0       0            0          0            0    1000  990    0
P   30100901 1   NX   90         10
P   30101002 1   NX   95          5
P   30101199 1   HC    0          0          0          0         0       0            0          0            0    1000  781    0
P   30101301 1   HC   48  630   439  361   101 1065    32  382  219       0          112  413    08 1001       0     257  610   32
P   30101301 1   NX   95          5
P   30101306 1   NX   95          5
P   30101399 1   NX   95          5
P   30101401 1   HC   48  630   439  361   101 1065    32  382  219       0          112  413    08 1001       0     257  610   32
P   30101499 1   HC   48  630   439  361   101 1065    32  382  219       0          112  413    08 1001       0     257  610   32
P   30101499 1   NX   95          5
P   30101501 1   HC    0          0          0        970  688    0       0            0         30  621       0       0         0
P   30101599 1   HC    0          0          0        970  688    0       0            0         30  621       0       0         0
P   30101800 1   HC    0        448  280     0          0       448       0            0          0            0       0    0    0
P   30101801 1   HC    0        448  280     0          0       448       0            0          0            0       0    0    0
P   30101801 1   NX   95          5
P   30101802 1   HC    0       1000  421     0          0         0       0            0          0            0       0         0
P   30101805 1   HC    0       1000  421     0          0         0       0            0          0            0       0         0
P   30101805 1   NX   95          5
P   30101812 1   HC    0          0          0         09  741    0       0          326  511   165  903       0       0        09
P   30101822 1   HC    0        448  280     0          0       448       0            0          0            0       0    0    0
P   30101822 1   NX   95          5
P   30101891 1   HC    0       1000  421     0          0         0       0            0          0            0       0         0
P   30101899 1   HC    0       1000  421     0          0         0       0            0          0            0       0         0
P   30101903 1   HC   35  538    31  421     0         86  581    0       0            0          0          800      43  263    0
P   30102099 1   HC  305 1078     0         65 1197   105  640    0       0          485  549    40 1162       0       0         0
P   30102399 1   NX   95          5
P   30102404 1   HC  305 1078     0         65 1197   105  640    0       0          485  549    40 1162       0       0         0
P   30102499 1   HC  305 1078     0         65 1197   105  640    0       0          485  549    40 1162       0       0         0
P   30102620 1   HC  968  930     0         04  921     0         0       0            0          0            0      28  731    0
P   30102620 1   NX   95          5
P   30102699 1   HC 1000  982     0          0          0         0       0            0          0            0       0    0    0
P   30102706 1   NX   95          5
P   30103399 1   HC  577  864     0        200 1023     0         0       0            0          0            0     131 1038    0
P   30103401 1   HC 1000  450     0          0          0         0       0            0          0            0       0         0
P   30103599 1   HC   48  630   439  361   101 1065    32  382  219       0          112  413    08 1001       0     257  610   32
P   30103599 1   NX   95          5
P   30105001 1   HC   48  630   439  361   101 1065    32  382  219       0          112  413    08 1001       0     257  610   32
P   30106099 1   HC   48  630   439  361   101 1065    32  382  219       0          112  413    08 1001       0     257  610   32
P   30109099 1   HC   48  630   439  361   101 1065    32  382  219       0          112  413    08 1001       0     257  610   32
P   30109101 1   HC    0       1000  421     0          0         0       0            0          0            0       0         0
P   30111001 1   HC  214 1140     0         94  921   142  721    0       0            0        550  891       0       0         0
P   30111102 1   HC 1000  982     0          0          0         0       0            0          0            0       0         0
F   30111103 1   HC 1000  982     0          0          0         0       0            0          0            0       0         0
P   30113299 1   HC    0          0        500 1282     0         0       0            0          0            0     500  781
P   30113799 1   HC    0          0          0          0         0       0         1000  581     0            0       0         0
P   30125099 1   HC   48  630   439  361   101 1065    32  382  219       0          112  413    08 1001       0     257  610   32
P   30125301 1   HC    0          0       1000  781     0         0       0            0          0            0       0         0
P   30125899 1   HC    0          0          0          0         0       0            0          0            0    1000  990    0
P   30128501 1   HC    0          0       1000  781     0         0       0            0          0            0       0         0
P   30190099 1   HC   48  630   439  361   101 1065    32  382  219       0          112  413    08 1001       0     257  610   32
P   30199999 1   HC   48  630   439  361   101 1065    32  382  219       0          112  413    08 1001       0     257  610   32
P   30199999 1   NX   95          5
P   30200202 1   NX   93          7
P   30200504 1   HC  500  441     0          0          0         0       0            0          0          500       0         0
P   30200504 1   NX   93          7
P   30200754 1   HC  300  629     0         20  921    80  300    0       0            0          0          550      40  781   80
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P    30200754 1   NX   94        6
P    30201203 1   NX   93        7
P    30201501 1   HC  500  441   0         0         0         0         0         0         0        500        0         0
P    30201501 1   NX   93        7
P    30299998 1   HC  500  441   0         0         0         0         0         0         0        500        0         0
P    30299998 1   NX   93        7
P    30300302 1   HC   05  441  302  289   07  921    0        277        05  541    0         0        453       233  473    0
P    30300302 1   NX   95        5
P    30300303 1   HC   05  441  302  289   07  921    0        277        05  541    0         0        453       233  473    0
P    30300306 1   HC   05  441  302  289   07  921    0        277        05  541    0         0        453       233  473    0
P    30300306 1   NX   95        5
P    30300308 1   HC   05  441  302  289   07  921    0        277        05  541    0         0        453       233  473    0
P    30300308 1   NX   95        5
P    30300599 1   HC   0    0    0         0         0         0         0         0         0        158       398  920    0
P    30300599 1   NX   95        5
P    30300807 1   HC   0    0    0         0         0         0         0         0         0        158       398  920    0
P    30300808 1   NX   95        5
P    30300813 1   HC   0    0    0         0         0         0         0         0         0        158       398  920    0
P    30300813 1   NX   95        5
P    30300899 1   HC   0    0    0         0         0         0         0         0         0        158       393  920    0
P    30300899 1   NX   95        5
P    30300901 1   HC   85  972   0         46  921    0         0         0         0         0          0       294  914    0
P    30300901 1   NX   95        5
P    30300902 1   NX   95        5
P    30300904 1   NX   95        5
P    30300911 1   HC  707  583   0         0         0         0         0         0         0        168       125  310    0
P    30300911 1   NX   95        5
P    30300920 1   NX   95        5
P    30300933 1   HC  707  583   0         0         0         0         0         0         0        168       125  310    0
P    30300933 1   NX   95        5
P    30300934 1   HC  707  583   0         0         0         0         0         0         0        163       125  310    0
P    30300934 1   NX   95        5
P    30300999 1   HC  707  583   0         0         0         0         0         0         0        168       125  310    0
P    30300999 1   NX   95        5
P    30400101 1   HC  381  918            160 1147  120  776             0         80  634   60 1032  101        70        30
P    30400103 1   HC  381  918            160 1147  120  776             0         80  634   60 1032  101        70        30
P    30400103 1   NX   93        7
P    30400199 1   HC  381  918            160 1147  120  776             0         80  634   60 1032  101        70        30
P    30400199 1   NX   93        7
P    30400201 1   HC  381  918            160 1147  120  776             0         80  634   60 1032  101        70        30
P    30400201 1   NX   93        7
P    30400203 1   HC  381  918            160 1147  120  776             0         80  634   60 1032  101        70        30
P    30400205 1   HC  381  913            160 1147  120  776             0         80  634   60 1032  101        70        30
P    30400205 1   NX   93        7
P    30400301 1   NX   93        7
P    30400302 1   NX   93        7
P    30400309 1   HC  331  918            160 1147  120  776             0         80  634   60 1032  101        70        30
P    30400309 1   NX   93        7
P    30400330 1   NX   93        7
P    30400399 1   HC  331  913            160 1147  120  776             0         80  634   60 1032  101        70        30
P    30400399 1   NX   93        7
P    30400401 1   HC  331  918            160 1147  120  776             0         80  634   60 1032  101        70        30
P    30400401 1   NX   93        7
P    30400402 1   NX   93        7
P    30400499 1   HC  381  918            160 1147  120  776             0         80  634   60 1032  101        70        30
P    30400704 1   NX   93        7
P    30400709 1   NX   93        7
P    30400799 1   NX   93        7
P    30400805 1   NX   93        7
P    30400806 1   NX   93        7
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P   30400807 1  NX   93         7
P   30400899 1  HC  331  918            160 1147  120  776          0    80  634   60 1032  101    70        30
P   30400899 1  NX   93         7
P   30405001 1  NX   93         7
P   30499999 1  HC  381  918            160 1147  120  776          0    80  634   60 1032  101    70        30
P   30499999 1  NX   93         7
P   30500102 1  HC  970  637   20  281    0         0        20     0     0         0         0    10  301    0
P   30500104 1  HC  970  637   20  281    0         0        20     0     0         0         0    10  301    0
P   30500199 1  HC  576  694  130  551   19  921    0        03     0     0         0       213    62  326    0
P   30500199 1  NX   90        10
P   30500201 1  HC  300  629    0        20  921   80  300    0     0     0         0       560    40  781   80
P   30500201 1  NX   95         5
P   30500305 1  HC  300  629    0        20  921   80  300    0     0     0         0       560    40  781   80
P   30500305 1  NX   92         8
P   30500311 1  NX   92         3
P   30500312 1  NX   92         8
P   30500399 1  HC  300  629    0        20  921   30  300    0     0     0         0       560    40  781   80
P   30500501 1  NX   92         8
P   30500504 1  NX   92         8
P   30500599 1  HC  576  694  130  551   19  921    0        03     0     0         0       213    62  326    0
P   30500599 1  NX   92         8
P   30500801 1  NX   95         5
P   30500899 1  NX   95         5
P   30501203 1  NX   98         2
P   30501204 1  HC  576  694  130  551   19  921    0        03     0     0         0       213    62  326    0
P   30501205 1  HC  576  694  130  551   19  921    0        03     0     0         0       213    62  326    0
P   30501205 1  NX   98         2
P   30501299 1  HC  576  694  130  551   19  921    0        03     0     0         0       213    62  326    0
P   30501401 1  HC  300  629    0        20  921   30  300    0     0     0         0       560    40  781   80
P   30501401 1  NX   98         2
P   30501402 1  HC  300  629    0        20  921   80  300    0     0     0         0       560    40  781   80
P   30501402 1  NX   98         2
P   30501410 1  NX   98         2
P   30501414 1  HC  300  629    0        20  921   80  300    0     0     0         0       560    40  781   80
P   30501414 1  NX   93         2
P   30501499 1  HC  300  629    0        20  921   80  300    0     0     0         0       560    40  781   80
P   30501499 1  NX   98         2
P   30501501 1  NX   93         2
P   30501503 1  HC  300  629    0        20  921   80  300    0     0     0         0       560    40  781   80
P   30501503 1  NX   93         2
P   30501599 1  NX   93         2
P   30501603 1  NX   93         2
P   30501604 1  HC  300  629    0        20  921   80  300    0     0     0         0       560    40  781   30
P   30501604 1  NX   93         2
P   30501699 1  HC  300  629    0        20  921   30  300    0     0     0         0       560    40  731   80
P   30501699 1  NX   93         2
P   30504033 1  HC  300  629    0        20  921   80  300    0     0     0         0       560    40  781   80
P   30504033 1  NX   95         5
P   30599999 1  HC  381  918            160 1147  120  776          0    80  634   60 1032  101    70        30
P   30599999 1  NX   98         2
P   30600101 1  HC  190  636    0         0        700  372    0     0     0         0       110     0       420
P   30600101 1  NX   85        15
P   30600102 1  HC  300  629    0        20  921   80  300    0     0     0         0       560    40  781    0
P   30600102 1  NX   95         5
P   30600103 1  HC  190  636    0         0        700  372    0     0     0         0       110     0       420
P   30600103 1  NX   85        15
P   30600104 1  HC  300  629    0        20  921   80  300    0     0     0         0       560    40  781    0
P   30600104 1  NX   85        15
P   30600105 1  HC  300  629    0        20  921   80  300    0     0     0         0       560    40  781    0
P   30600105 1  NX   85        15
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P   30600201 1  HC  130  862  0            0       510  300    0      0      0         0       360      0       510
P   30600201 1  NX   85       15
P   30600301 1  HC  130  862  0            0       510  300    0      0      0         0       360      0       510
P   30600301 1  NX   85       15
P   30600401 1  HC  190  636  0            0       700  372    0      0      0         0       110      0       420
P   30600401 1  NX   95       5
P   30600402 1  HC  810  559  0           16  987    0         0      0      0         0        09    165  304    0
P   30600501 1  HC  930  737  0            0         0         0      0      0         0        29     41  470    0
P   30600502 1  HC  810  559  0           16  987    0         0      0      0         0        09    165  304    0
P   30600503 1  HC  930  737  0            0         0         0      0      0         0        29     41  470    0
P   30600504 1  HC  930  737  0            0         0         0      0      0         0        29     41  470    0
P   30600602 1  HC  930  737  0            0         0         0      0      0         0        29     41  470    0
P   30600603 1  HC  930  737  0            0         0         0      0      0         0        29     41  470    0
P   30600701 1  HC 1000  722  0            0         0         0      0      0         0         0      0         0
P   30600701 1  NX   95       5
P   30600702 1  HC 1000  722  0            0         0         0      0      0         0         0      0         0
P   30600801 1  HC  647  625  01   421    07  962    0         0      0      0         0       286     59  303    0
P   30600802 1  HC  908  441  51   421     0         0         0      0      0         0         0     41  301    0
P   30600803 1  HC  907  857  0           43  959    0         0      0      0         0        33     17  363    0
P   30600804 1  HC  711  500  100  434     0         0         0      0      0         0       133     56  301    0
P   30600805 1  HC  930  737  0            0         0         0      0      0         0        29     41  470    0
P   30600805 1  NX   95       5
P   30600806 1  HC  647  625  01   421    07  962    0         0      0      0         0       286     59  303    0
P   30600807 1  HC  647  625  01   421    07  962    0         0      0      0         0       286     59  303    0
P   30600901 1  NX   95       5
P   30600999 1  HC  300  441  0            0       200  300    0      0      0         0       200    300  301  200
P   30601101 1  HC  810  559  0           16  987    0         0      0      0         0        09    165  304    0
P   30601201 1  HC  810  559  0           16  987    0         0      0      0         0        09    165  304    0
P   30601201 1  NX   95       5
P   30601599 1  NX   95       5
P   30601613 1  HC  810  559  0           16  937    0         0      0      0         0        09    165  304    0
P   30699998 1  HC  810  559  0           16  937    0         0      0      0         0        09    165  304    0
P   30699998 1  NX   95       5
P   30699999 1  HC  937  656  0            0         0         0      0      0         0        26     37  301    0
P   30699999 1  NX   90       10
P   30700401 1  HC  401 1381  0           80  987  250  693    0      0    169  432                    17 1658
P   30700401 1  NX   95       5
P   30700799 1  HC  401 1381  0           80  987  250  693    0      0    169  432                    17 1658
P   30700899 1  HC  401 1381  0           80  987  250  693    0      0    169  432                    17 1658
P   30702099 1  HC    0       0            0       970  688    0      0      0        30  621    0      0    0    0
P   30799999 1  NX   95       5
P   30800107 1  HC 1000  982  0            0         0         0      0      0         0         0      0    0    0
P   30800197 1  HC 1000  982  0            0         0         0      0      0         0         0      0    0    0
P   30800198 1  HC 1000  982  0            0         0         0      0      0         0         0      0    0    0
P   30800199 1  HC 1000  982  0            0         0         0      0      0         0         0      0    0    0
P   30800699 1  HC 1000  982  0            0         0         0      0      0         0         0      0    0    0
P   30900199 1  HC    0    0  0            0         0         0      0      0         0       158    398  920    0
P   30901099 1  NX   97       3
P   30902099 1  HC    0       89   316     0         0        59      0      0         0       733    178  269    0
P   30902099 1  NX   97       3
P   30999999 1  HC    0       89   316     0         0        59      0      0         0       733    178  269    0
P   30999999 1  NX   97       3
P   32099199 1  HC    0       0            0       500  688    0      0    500  580    0         0      0         0
P   32099999 1  HC    0       1000 421     0         0         0      0      0         0         0      0         0
P   33000199 1  HC    0       0            0       500  688    0      0    500  580    0         0      0         0
P   33000203 1  HC    0       0            0       500  688    0      0    500  580    0         0      0         0
P   33000299 1  HC    0       1000 421     0         0         0      0      0         0         0      0         0
P   33000399 1  NX   95       5
P   33000499 1  HC  331  918             160 1147  120  776           0     80  634   60 1032  101     70        30
P   39000431 1  NX   95       5
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P     39000499 1   HC  381   918              160 1147   120  776            0     80  634    60 1032   101     70          30
P     39000499 1   NX   95          5
P     39000508 1   HC  381   918              160 1147   120  776            0     80  634    60 1032   101     70          30
P     39000508 1   NX   96          4
P     39000531 1   HC  381   918              160 1147   120  776            0     30  634    60 1032   101     70          30
P     39000531 1   NX   96          4
P     39000599 1   HC  190   635    0           0    0   700  372     0      0      0          0        110      0        420
P     39000599 1   NX   96          4
P     39000699 1   HC  300   629    0          20  921    80  300     0      0      0          0        560     40  781    80
P     39000699 1   NX   98          2
P     39000899 1   NX   95          5
P     39001099 1   NX   95          5
P     39099997 1   NX   98          2
P     39999999 1   HC    0          0           0          0          0      0      0          0          0   1000 1317     0
P     39999999 1   NX   95          5
P     40100101 1   HC    0          0           0          0          0      0      0          0          0    175 1658     0
P     40100102 1   HC 1000  1382    0           0          0          0      0      0          0          0      0          0
P     40100105 1   HC 1000  1382    0           0          0          0      0      0          0          0      0          0
P     40100201 1   HC 1000  1382    0           0          0          0      0      0          0          0      0          0
P     40100202 1   HC    0          0           0          0          0      0      0          0          0    217 1334     0
P     40100203 1   HC    0          0           0          0          0      0      0          0          0    175 1658     0
P     40100204 1   HC    0          0           0          0          0      0      0          0          0    171  849     0
P     40100205 1   HC    0        213   280     0          0        213      0      0          0          0      0          0
P     40100299 1   HC    0          0           0          0          0      0      0          0          0    217 1334     0
P     40199999 1   HC    0          0        1000  921     0          0      0      0          0          0      0          0
P     40200101 1   HC    0          0         774  958   226  638     0      0      0          0          0      0          0
P     40200101 1   NX   90         10
P     40200102 1   HC    0          0           0        1000  581     0      0      0          0          0      0          0
P     40200110 1   HC    0          0         774  958   226  638     0      0      0          0          0      0          0
P     40200199 1   HC    0          0         760  958   240  638     0      0      0          0          0      0          0
P     40200199 1   NX   90         10
P     40200299 1   HC    0          0           0         970  688     0      0      0         30  621     0      0    0     0
P     40200301 1   HC    0          0           0         970  688     0      0      0         30  621     0      0    0     0
P     40200399 1   HC    0          0           0         970  688     0      0      0         30  621     0      0    0     0
P     40200401 1   HC  250  1140    0         170  974   390  703     0      0    150  601    40 1400     0      0          0
P     40200406 1   HC  268  1101   57   531    21  921    39  324     0      0     70  601   452 1034    90     03  260    33
P     40200499 1   HC  174  1009    0         139  921   166  721     0      0    157  631   364 1137     0      0          0
P     40200501 1   HC  676  1140    0          72  994   158  688     0      0     59  578    35 1123     0      0          0
P     40200501 1   NX   90         10
P     40200503 1   HC    0          0           0        1000  721     0      0      0          0          0      0          0
P     40200510 1   HC  676  1140    0          72  994   158  688     0      0     59  578    35 1123     0      0          0
P     40200599 1   HC  676  1140    0          72  994   158  688     0      0     59  578    35 1123     0      0          0
P     40200599 1   NX   90         10
P     40200601 1   HC    0          0          87  921   689  581     0      0      0          0          0    224  781     0
P     40200699 1   HC  917  1140    0          83 1012     0          0      0      0          0          0      0          0
P     40200701 1   HC    0          0         760  958   240  638     0      0      0          0          0      0          0
P     40200701 1   NX   90         10
P     40200706 1   HC    0          0         760  958   240  638     0      0      0          0          0      0          0
P     40200801 1   HC  265   560   20   280     0          0         20      0      0          0        665     50  301     0
P     40200801 1   NX   90         10
P     40200802 1   HC    0          0           0         970  688     0      0      0         30  621     0      0          0
P     40200802 1   NX   90         10
P     40200803 1   HC    0         24   280   106  921   302  581    24      0      0          0        399    169  637     0
P     40200803 1   NX   90         10
P     40200898 1   HC  268  1101   57   531    21  921    39  324     0      0     70  601   452 1084    90     03  260    33
P     40200898 1   NX   90         10
P     40200899 1   HC  268  1101   57   531    21  921    39  324     0      0     70  601   452 1084    90     03  260    33
P     40200901 1   HC  401  1381    0          80  987   250  693     0      0    169  432     0          0     17 1658     0
P     40200902 1   HC    0          0           0        1000  581     0      0      0          0          0      0          0
P     40200904 1   HC    0          0           0          0          0      0   1000  741     0          0      0          0
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P  40200917 1  HC     0          0          0          0          0     0   1000  320     0          0      0         0
P  40200918 1  HC     0          0          0       1000  721     0     0      0          0          0      0         0
P  40200920 1  HC  1000  1140    0          0          0          0     0      0          0          0      0         0
P  40200921 1  HC     0          0        760  953   240  638     0     0      0          0          0      0         0
P  40200922 1  HC     0          0          0        970  638     0     0      0         30  621     0      0         0
P  40201101 1  HC    70   512  170  308     0          0        130     0      0          0        690     70  301   32
P  40201301 1  HC    70   512  170  308     0          0        130     0      0          0        690     70  301   32
P  40201726 1  HC   401  1381    0         80  987   250  693     0     0    169  432                      17 1658
P  40201727 1  HC   401  1381    0         80  987   250  693     0     0    169  432                      17 1658
P  40201799 1  HC   401  1381    0         80  987   250  693     0     0    169  432                      17 1658
P  40201801 1  HC   401  1381    0         80  987   250  693     0     0    169  432                      17 1658
P  40201801 1  NX    90         10
P  40201806 1  HC   401  1381    0         80  987   250  693     0     0    169  432                      17 1658
P  40202103 1  HC     0          0          0        970  688     0     0      0         30  621     0      0    0    0
P  40202301 1  HC   401  1381    0         80  987   250  693     0     0    169  432                      17 1658
P  40202306 1  HC   401  1381    0         80  987   250  693     0     0    169  432                      17 1658
P  40202401 1  HC   401  1381    0         80  987   250  693     0     0    169  432                      17 1658
P  40202406 1  HC   401  1381    0         80  987   250  693     0     0    169  432                      17 1658
P  40202501 1  HC   401  1381    0         80  987   250  693     0     0    169  432                      17 1658
P  40299999 1  HC   214  1140    0         94  921   142  721     0     0      0        550  891     0      0         0
P  40299999 1  NX    90         10
P  40300101 1  HC   928   145   17  280    06  780    48  300     0     0      0          0          0      0         0
P  40300102 1  HC   831   640    0          0          0          0     0      0          0         62     57  303    0
P  40300103 1  HC   928   145   17  280    06  780    48  300     0     0      0          0          0      0         0
P  40300104 1  HC   847   621    0         14  921     0          0     0      0          0         83     51  424    0
P  40300106 1  HC   847   621    0         14  921     0          0     0      0          0         88     51  424    0
P  40300107 1  HC   847   621    0         14  921     0          0     0      0          0         88     51  424    0
P  40300108 1  HC     0          0          0          0          0     0      0          0          0   1000  781    0
P  40300116 1  HC     0          0       1000  921     0          0     0      0          0          0      0         0
P  40300150 1  HC  1000  1652    0          0          0          0     0      0          0          0      0         0
P  40300151 1  HC   881   640    0          0          0          0     0      0          0         62     57  303    0
P  40300152 1  HC  1000  1652    0          0          0          0     0      0          0          0      0         0
P  40300153 1  HC     0          0          0          0          0     0      0          0          0   1000  781    0
P  40300161 1  HC     0          0       1000  921     0          0     0      0          0          0      0         0
P  40300198 1  HC  1000   790    0          0          0          0     0      0          0          0      0         0
P  40300199 1  HC  1000  1652    0          0          0          0     0      0          0          0      0         0
P  40300201 1  HC   928   145   17  280    06  780    48  300     0     0      0          0          0      0         0
P  40300202 1  HC   928   145   17  280    06  780    48  300     0     0      0          0          0      0         0
P  40300203 1  HC   847   621    0         14  921     0          0     0      0          0         88     51  424    0
P  40300204 1  HC   847   621    0         14  921     0          0     0      0          0         88     51  424    0
P  40300205 1  HC  1000  1652    0          0          0          0     0      0          0          0      0         0
P  40300206 1  HC   847   621    0         14  921     0          0     0      0          0         88     51  424    0
P  40300207 1  HC   847   621    0         14  921     0          0     0      0          0         88     51  424    0
P  40300208 1  HC     0          0          0          0          0     0      0          0          0   1000  781    0
P  40300211 1  HC  1000  1002    0          0          0          0     0      0          0          0      0    0    0
P  40300212 1  HC  1000   862    0          0          0          0     0      0          0          0      0         0
P  40300216 1  HC     0          0       1000  921     0          0     0      0          0          0      0         0
P  40300299 1  HC  1000  1652    0          0          0          0     0      0          0          0      0         0
P  40300302 1  HC   928   145   17  280    06  780    48  300     0     0      0          0          0      0         0
P  40300312 1  HC  1000   722    0          0          0          0     0      0          0          0      0         0
P  40300398 1  HC   908   441   51  421     0          0          0     0      0          0          0     41  301    0
P  40300399 1  HC   908   441   51  421     0          0          0     0      0          0          0     41  301    0
P  40301019 1  HC   948   833    0          0          0          0     0      0          0         42     10  301    0
P  40301020 1  HC   948   838    0          0          0          0     0      0          0         42     10  301    0
P  40301099 1  HC  1000   862    0          0          0          0     0      0          0          0      0         0
P  40301102 1  HC   928   145   17  280    06  780    48  300     0     0      0          0          0      0         0
P  40301109 1  HC   831   640    0          0          0          0     0      0          0         62     57  303    0
P  40301198 1  HC   928   145   17  280    06  780    48  300     0     0      0          0          0      0         0
P  40301199 1  HC   948   838    0          0          0          0     0      0          0         42     10  301    0
P  40301299 1  HC   948   833    0          0          0          0     0      0          0         42     10  301    0
```

```
P   40302001 1   HC 1000  862    0          0         0          0       0       0         0          0       0          0
P   40399999 1   HC 1000 1652    0          0         0          0       0       0         0          0       0          0
P   40400101 1   HC  928  145   17  280    06  780   48  300     0       0       0         0          0       0          0
P   40400110 1   HC  928  145   17  280    06  780   48  300     0       0       0         0          0       0          0
P   40400112 1   HC  928  145   17  280    06  780   48  300     0       0       0         0          0       0          0
P   40400199 1   HC  928  145   17  280    06  780   48  300     0       0       0         0          0       0          0
P   40500101 1   HC   70  512  170  308     0         0        130       0       0         0        690      70  301     0
P   40500201 1   HC   70  512  170  308     0         0        130       0       0         0        690      70  301     0
P   40500301 1   HC    0         0          0        09  741     0       0     826  511  165  908     0       0         09
P   40500304 1   HC    0         0          0         0          0       0    1000  461    0          0       0          0
P   40500305 1   HC    0         0          0        09  741     0       0     826  511  165  908     0       0         09
P   40500306 1   HC    0         0          0        09  741     0       0     826  511  165  908     0       0         09
P   40500311 1   HC    0         0          0        09  741     0       0     826  511  165  908     0       0         09
P   40500401 1   HC  166  547    0          0         0          0       0      09  601    0        377     160  604     0
P   40500499 1   HC  166  547    0          0         0          0       0      09  601    0        377     160  604     0
P   40500501 1   HC  192  990    0           120  921   86  705     0       0     197  530  405  956     0       0          0
P   40500506 1   HC  610 1077    0           130 1195    0          0       0     180  489   80 1162     0       0          0
P   40500511 1   HC    0         0          0        09  741     0       0     826  511  165  908     0       0         09
P   40500598 1   HC  830 1140    0           170  951    0          0       0       0         0          0       0          0
P   40500599 1   HC  830 1140    0           170  951    0          0       0       0         0          0       0          0
P   40600101 1   HC  928  145   17  280    06  780   48  300     0       0       0         0          0       0          0
P   40600105 1   HC 1000 1652    0          0         0          0       0       0         0          0       0          0
P   40600126 1   HC  928  145   17  280    06  780   48  300     0       0       0         0          0       0          0
P   40600126 1   NX 90         10
P   40600127 1   HC  847  621    0         14  921    0          0       0       0         0         33      51  424     0
P   40600130 1   HC 1000 1652    0          0         0          0       0       0         0          0       0          0
P   40600131 1   HC  928  145   17  280    06  780   48  300     0       0       0         0          0       0          0
P   40600135 1   HC  948  838    0          0         0          0       0       0         0         42      10  301     0
P   40600140 1   HC 1000 1652    0          0         0          0       0       0         0          0       0          0
P   40600197 1   HC  928  145   17  280    06  780   48  300     0       0       0         0          0       0          0
P   40600198 1   HC  928  145   17  280    06  780   48  300     0       0       0         0          0       0          0
P   40600240 1   HC  928  145   17  280    06  780   48  300     0       0       0         0          0       0          0
P   40600253 1   HC  881  640    0          0         0          0       0       0         0         62      57  303     0
P   40600304 1   HC  928  145   17  280    06  780   48  300     0       0       0         0          0       0          0
P   40600401 1   HC  928  145   17  280    06  780   48  300     0       0       0         0          0       0          0
P   49000105 1   HC    0       448  280     0         0        448       0       0         0          0       0    0     0
P   49000199 1   HC    0         0           760  958  240  638     0       0       0         0          0       0          0
P   49099999 1   HC  610 1077    0           130 1195    0          0       0     180  489   80 1162     0       0          0
P   50100101 1   HC   96  756  270  685    40 1320  110  726     0       0      80  440    0        282     122  324
P   50100101 1   NX 85         15
P   50100102 1   HC   96  756  270  685    40 1320  110  726     0       0      80  440    0        282     122  324
P   50100102 1   NX 85         15
P   50100505 1   NX 85         15
P   50100506 1   HC    0        92  286     0         0         87       0       0         0        804     104  552     0
P   50100506 1   NX 85         15
P   50200101 1   NX 85         15
P   50200505 1   HC   96  756  270  685    40 1320  110  726     0       0      80  440    0        282     122  324
P   50200505 1   NX 85         15
P   50300101 1   HC   96  756  270  685    40 1320  110  726     0       0      80  440    0        282     122  324
P   50300101 1   NX 85         15
P   50300103 1   HC   96  756  270  685    40 1320  110  726     0       0      80  440    0        282     122  324
P   50300103 1   NX 85         15
P   50300106 1   NX 85         15
P   50300202 1   HC   96  756  270  685    40 1320  110  726     0       0      80  440    0        282     122  324
P   50300202 1   NX 85         15
P   50300506 1   HC   96  756  270  685    40 1320  110  726     0       0      80  440    0        282     122  324
P   50300599 1   HC   96  756  270  685    40 1320  110  726     0       0      80  440    0        282     122  324
P   50300599 1   NX 85         15
P   50390006 1   NX 95          5
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P    90100111 1    HC  148   646    90   750    50  1250   100   833     0      0           0           0      486         126   278
P    90100111 1    NX  96           4
P    90100222 1    HC  148   646    90   750    50  1250   100   833     0      0           0           0      486         126   278
P    90100222 1    NX  96           4
P    90100330 1    HC  513   728    0            0          487   300     0      0           0           0        0           0          487
P    90100330 1    NX  75           25
P    90100440 1    HC  190   636    0            0          700   372     0      0           0           0      110           0          420
P    90100440 1    NX  99           1
P    90100500 1    HC  300   629    0           20   921    80   300     0      0           0           0      560          40   781    80
P    90100500 1    NX  87           13
P    90100600 1    HC  454   850    255  311    00    00    00    00   191     05   541     0           0       98         193   283     0
P    90100600 1    NX  85           15
P    90200111 1    HC  148   646    90   750    50  1250   100   833     0      0           0           0      486         126   278
P    90200111 1    NX  96           4
P    90200222 1    HC  148   646    90   750    50  1250   100   833     0      0           0           0      486         126   278
P    90200222 1    NX  96           4
P    90200330 1    HC  513   728    0            0          487   300     0      0           0           0        0    0                487
P    90200330 1    NX  99           1
P    90200440 1    HC  190   636    0            0          700   372     0      0           0           0      110           0          420
P    90200440 1    NX  99           1
P    90200500 1    HC  300   629    0           20   921    80   300     0      0           0           0      560          40   721    80
P    90200500 1    NX  97           3
P    90300222 1    HC  148   646    90   750    50  1250   100   833     0      0           0           0      486         126   278
P    90300222 1    NX  96           4
P    90300330 1    HC  513   728    0            0          487   300     0      0           0           0        0           0          487
P    90300330 1    NX  96           4
P    90300440 1    HC  190   636    0            0          700   372     0      0           0           0      110           0          420
P    90300440 1    NX  985          15
P    90300500 1    HC  300   629    0           20   921    80   300     0      0           0           0      560          40   781    80
P    90300500 1    NX  945          55
P    90401100 1    HC   96   756    270  685    40  1320   110   726     0      0          80   440     0      282         122   324
P    90401100 1    NX  35           15
P    90401200 1    HC  711   145    0           94   780   149   300     0      0           0           0        0           0
P    90401300 1    HC  711   145    0           94   780   149   300     0      0           0           0        0           0
P    90501100 1    HC  401  1381    0           80   987   250   693     0      0         169   432                          17  1658
P    90501200 1    HC  502   145    12   280    63   780   155   300    12
P    90501300 1    HC  0            99   280    0           0           99      0           0           0        0           0
P    90600700 1    HC  277   912    285  384   186   985    38   300   117      0           0           0       77         137   324    38
P    90600700 1    NX  95           5
P    90600800 1    HC  277   912    285  384   186   985    38   300   117      0           0           0       77         137   324    38
P    90600800 1    NX  95           5
P    90600900 1    HC  277   912    285  384   186   985    38   300   117      0           0           0       77         137   324    38
P    90600900 1    NX  95           5
P    90700700 1    HC  427  1569    147  308   199  1115   122   300   107      0           0           0       44          61   332   122
P    90700700 1    NX  90           10
P    90700800 1    HC  427  1569    147  308   199  1115   122   300   107      0           0           0       44          61   332   122
P    90700800 1    NX  90           10
P    90702400 1    HC  530  1965    120  396   120  1780   200   593     0      0           0           0       20          10   260     0
P    90702400 1    NX  90           10
P    90803100 1    HC  515  1178    150  796   190   972    80   440    40      0          05   790     0       20          40   450    50
P    90803100 1    NX  97           3
P    90803200 1    HC  515  1178    150  796   190   972    80   440    40      0          05   790     0       20          40   450    50
P    90803200 1    NX  97           3
P    90803300 1    HC  515  1178    150  796   190   972    80   440    40      0          05   790     0       20          40   450    50
P    90803300 1    NX  97           3
P    90900440 1    HC  190   636    0            0          700   372     0      0           0           0      110           0          420
P    90900440 1    NX  98           2
P    90904230 1    HC  427  1569    147  308   199  1115   122   300   107      0           0           0       44          61   332   122
P    90904230 1    NX  96           4
P    90904430 1    HC  277   912    285  384   186   985    38   300   117      0           0           0       77         137   324    38
```

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P    90904430 1   NX   95         5
P    91000600 1   HC  948  838    0         0         0         0         0          0        0         42       10   301    0
P    91000700 1   HC   04  650    0         0         0         0         0          0        0        970       23   320    0
P    91000800 1   HC  500 1382    0         0         0         0         0          0        0          0       87  1658    0
P    91000900 1   HC  577  864    0       200 1023    0         0         0          0        0          0      131  1038    0
P    91002100 1   HC  656  145              0        69  300     0         0          0        0          0        0          0
P    91002230 1   HC  309 1010   31  303   53 1195   01  741    23         0        183 500   54 1075   230       53   568   01
P    91002300 1   HC  401 1381    0        80  987  250  693     0         0        169 432                       17  1658
P    91002400 1   HC  427 1569  147  308  199 1115  122  300   107         0          0        0         44       61   332  122
P    91002400 1   NX   90        10
P    91002600 1   HC  928  145   17  280   06  780   48  300     0         0          0        0          0        0          0
P    91005100 1   HC  928  145   17  280   06  780   48  300     0         0          0        0          0        0          0
P    91005200 1   HC  928  145   17  280   06  780   48  300     0         0          0        0          0        0          0
P    91308100 1   HC  454  850  255  311   00   00   00   00   191        05  541     0        0         98      193   283    0
P    91308100 1   NX   85        15
P    91308200 1   HC  492  886  489  431    0         0       194         0          0        0          0       19   260    0
P    91308200 1   NX   85        15
P    91308300 1   HC  277  912  285  384  186  985   38  300   117         0          0        0         77      137   324   38
P    91308300 1   NX   95         5
P    91308400 1   HC   96  756  270  685   40 1320  110  726     0         0         80 440    0        282      122   324
P    91308400 1   NX   85        15
P    91308500 1   HC  492  886  489  431    0         0       194         0          0        0          0       19   260    0
P    91308500 1   NX   85        15
```

APPENDIX E

TEMPORAL FACTOR FILES

For both point and area sources, temporal data were divided into three sections. The first section expresses the typical weekday as a percent of the oxidant season. (If no variations between weekday and weekend day occurred, 1.087% was used, since there were 92 days in the 1979 oxidant season.) This section is characterized by a "D" in cc 80. The seasonal distribution follows. It is characterized by the final "S". This section divides the year into the four seasons, beginning with December/January/February, and expresses each season as a percent of the entire year. Finally, typical hour of the day splits, characterized by an "H" in the last column, are given. Each hour of the day is expressed as a percentage of the typical weekday during the oxidant season. The 24 hours of the day are split into four six-hour groups identified in cc 79. The first group (1H) represents hours 01 through 06, and so on, with the fourth group (4H) providing data for hours 19 through 24.

Decimal points are identified by carats in the card column indicator on the first page of each file. Decimals are in the same columns regardless of line number. The point source file is presented first, followed by the area source data. Most of the point source file is arranged according to state (cc 2 and 3), county (cc 4-7), plant (cc 8-11), and point identification number (cc 12 and 13) taken from the EIS/P&R masterfile. The remainder of the point source file is organized by SCC (cc 6-13). The file for area sources is arranged according to SCC (cc 6-13). The point source file is followed by the area source file.

```
               123456789A123456789B123456789C123456789D123456789E123456789F123456789G123456789H
                                   ▲        ▲        ▲        ▲        ▲        ▲
  1.           K080180000701        10870                                                              D
  2.           K080180000701       442736   333974   170638    52652                                   S
  3.           K080180000701        51801    50675    49550    49550    49550    49550                  1H
  4.           K080180000701        49550    49550    49550    49550    49550    56306                  2H
  5.           K080180000701        56306    56306    56306    56306    56306    56306                  3H
  6.           K080180000701        42792    14640                                                     4H
  7.           K080180000702        10870                                                              D
  8.           K080180000702       252139   269002   209107   269702                                   S
  9.           K080180000702        35176    35176    35176    35176    35176    35176                  1H
 10.           K080180000702        35176    35176    35176    35176    35176    35176                  2H
 11.           K080180000702        50251    50251    50251    50251    50251    50251                  3H
 12.           K080180000702        50251    50251    50251    50251    37689    37689                  4H
 13.           K080180000703        10870                                                              D
 14.           K080180000703       322920   237550   201980   237550                                   S
 15.           K080180000703                                                                          1H
 16.           K080180000703                          33691    66616    66615    66616                  2H
 17.           K080180000703        66615    66616    66615    66616    66615    66616                  3H
 18.           K080180000703        66615    66616    66615    66616    66616    33691                  4H
 19.           K080180000704        10870                                                              D
 20.           K080180000704       334349   275577   195037   195037                                   S
 21.           K080180000704                                                                          1H
 22.           K080180000704                          17856    53570    71429    71429                  2H
 23.           K080180000704        71429    71429    71429    71429    71429    71429                  3H
 24.           K080180000704        71429    71429    71429    71429    53570    17856                  4H
 25.           K080180000705        10870                                                              D
 26.           K080180000705       340929   177567   235573   245931                                   S
 27.           K080180000705        15703    15703    15703    15703    15703    15703                  1H
 28.           K080180000705        15703    15703    26331    48995    60302    60302                  2H
 29.           K080180000705        60302    60302    60302    60302    60302    60302                  3H
 30.           K080180000705        60302    60302    60302    60302    48995    26381                  4H
 31.           K080180001503        15217                                                              D
 32.           K080180001503       25       25       25       25                                       S
 33.           K080180001503        0        0        0        0        0        52631                  1H
 34.           K080180001503        52632    52632    52632    52632    52632    52632                  2H
 35.           K080180001503        52632    52632    52632    52632    52632    52631                  3H
 36.           K080180001503        52631    52631    52631    52631    52631    52631                  4H
 37.           K080180001504        15217                                                              D
 38.           K080180001504       25       25       25       25                                       S
 39.           K080180001504        0        0        0        0        0        52631                  1H
 40.           K080180001504        52632    52632    52632    52632    52632    52632                  2H
 41.           K080180001504        52632    52632    52632    52632    52632    52631                  3H
 42.           K080180001504        52631    52631    52631    52631    52631    52631                  4H
 43.           K080180001505        15217                                                              D
 44.           K080180001505       25       25       25       25                                       S
 45.           K080180001505        0        0        0        0        0        52631                  1H
 46.           K080180001505        52632    52632    52632    52632    52632    52632                  2H
 47.           K080180001505        52632    52632    52632    52632    52632    52631                  3H
 48.           K080180001505        52631    52631    52631    52631    52631    52631                  4H
 49.           K080180001506        15217                                                              D
 50.           K080180001506       25       25       25       25                                       S
 51.           K080180001506        0        0        0        0        0        52631                  1H
 52.           K080180001506        52632    52632    52632    52632    52632    52632                  2H
 53.           K080180001506        52632    52632    52632    52632    52632    52631                  3H
 54.           K080180001506        52631    52631    52631    52631    52631    52631                  4H
 55.           K080180001507        15217                                                              D
 56.           K080180001507       25       25       25       25                                       S
 57.           K080180001507        0        0        0        0        0        52631                  1H
 58.           K080180001507        52632    52632    52632    52632    52632    52632                  2H
 59.           K080180001507        52632    52632    52632    52632    52632    52631                  3H
 60.           K080180001507        52631    52631    52631    52631    52631    52631                  4H
 61.   K080180001508      15217                                            D
 62.   K080180001508     25      25      25      25                        S
 63.   K080180001508     0       0       0       0       0        52631    1H
 64.   K080180001508      52632   52632   52632   52632   52632   52632    2H
 65.   K080180001508      52632   52632   52632   52632   52632   52631    3H
 66.   K080180001508      52631   52631   52631   52631   52631   52631    4H
 67.   K080180001509      15217                                            D
 68.   K080180001509     25      25      25      25                        S
 69.   K080180001509     0       0       0       0       0        52631    1H
 70.   K080180001509      52632   52632   52632   52632   52632   52632    2H
 71.   K080180001509      52632   52632   52632   52632   52632   52631    3H
 72.   K080180001509      52631   52631   52631   52631   52631   52631    4H
 73.   K080180001510      15217                                            D
 74.   K080180001510     25      25      25      25                        S
 75.   K080180001510     0       0       0       0       0        52631    1H
 76.   K080180001510      52632   52632   52632   52632   52632   52632    2H
 77.   K080180001510      52632   52632   52632   52632   52632   52631    3H
 78.   K080180001510      52631   52631   52631   52631   52631   52631    4H
 79.   K080180001511      15217                                            D
 80.   K080180001511     25      25      25      25                        S
 81.   K080180001511     0       0       0       0       0        52631    1H
 82.   K080180001511      52632   52632   52632   52632   52632   52632    2H
 83.   K080180001511      52632   52632   52632   52632   52632   52631    3H
 84.   K080180001511      52631   52631   52631   52631   52631   52631    4H
 85.   K080180001512      15217                                            D
 86.   K080180001512     25      25      25      25                        S
 87.   K080180001512     0       0       0       0       0        52631    1H
 88.   K080180001512      52632   52632   52632   52632   52632   52632    2H
 89.   K080180001512      52632   52632   52632   52632   52632   52631    3H
 90.   K080180001512      52631   52631   52631   52631   52631   52631    4H
 91.   K080180001513      15217                                            D
 92.   K080180001513     25      25      25      25                        S
 93.   K080180001513     0       0       0       0       0        52631    1H
 94.   K080180001513      52632   52632   52632   52632   52632   52632    2H
 95.   K080180001513      52632   52632   52632   52632   52632   52631    3H
 96.   K080180001513      52631   52631   52631   52631   52631   52631    4H
 97.   K080180001514      15217                                            D
 98.   K080180001514     25      25      25      25                        S
 99.   K080180001514     0       0       0       0       0        52631    1H
100.   K080180001514      52632   52632   52632   52632   52632   52632    2H
101.   K080180001514      52632   52632   52632   52632   52632   52631    3H
102.   K080180001514      52631   52631   52631   52631   52631   52631    4H
103.   K080180001515      15217                                            D
104.   K080180001515     25      25      25      25                        S
105.   K080180001515     0       0       0       0       0        52631    1H
106.   K080180001515      52632   52632   52632   52632   52632   52632    2H
107.   K080180001515      52632   52632   52632   52632   52632   52631    3H
108.   K080180001515      52631   52631   52631   52631   52631   52631    4H
109.   K080180001617      10370                                            D
110.   K080180001617     250417  248191  255982  245409                    S
111.   K080180001617      41667   41666   41667   41667   41666   41667    1H
112.   K080180001617      41667   41666   41667   41667   41666   41667    2H
113.   K080180001617      41667   41666   41667   41667   41666   41667    3H
114.   K080180001617      41667   41666   41667   41667   41666   41667    4H
115.   K080180001618      10370                                            D
116.   K080180001618     250417  248191  255982  245409                    S
117.   K080180001618      41667   41666   41667   41667   41666   41667    1H
118.   K080180001618      41667   41666   41667   41667   41666   41667    2H
119.   K080180001618      41667   41666   41667   41667   41666   41667    3H
120.   K080180001618      41667   41666   41667   41667   41666   41667    4H
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121.   K080180001619     10870                                                  D
122.   K080180001619    250417  248191  255982  245409                          S
123.   K080180001619     41667   41666   41667   41667   41666   41667          1H
124.   K080180001619     41667   41666   41667   41667   41666   41667          2H
125.   K080180001619     41667   41666   41667   41667   41666   41667          3H
126.   K080180001619     41667   41666   41667   41667   41666   41667          4H
127.   K080180001620     10870                                                  D
128.   K080180001620    250417  248191  255982  245409                          S
129.   K080180001620     41667   41666   41667   41667   41666   41667          1H
130.   K080180001620     41667   41666   41667   41667   41666   41667          2H
131.   K080180001620     41667   41666   41667   41667   41666   41667          3H
132.   K080180001620     41667   41666   41667   41667   41666   41667          4H
133.   K080180001621     10870                                                  D
134.   K080180001621    250417  248191  255982  245409                          S
135.   K080180001621     41667   41666   41667   41667   41666   41667          1H
136.   K080180001621     41667   41666   41667   41667   41666   41667          2H
137.   K080180001621     41667   41666   41667   41667   41666   41667          3H
138.   K080180001621     41667   41666   41667   41667   41666   41667          4H
139.   K080180001634     10870                                                  D
140.   K080180001634    250417  248191  255982  245409                          S
141.   K080180001634     41667   41666   41667   41667   41666   41667          1H
142.   K080180001634     41667   41666   41667   41667   41666   41667          2H
143.   K080180001634     41667   41666   41667   41667   41666   41667          3H
144.   K080180001634     41667   41666   41667   41667   41666   41667          4H
145.   K080180001635     10870                                                  D
146.   K080180001635    250417  248191  255982  245409                          S
147.   K080180001635     41667   41666   41667   41667   41666   41667          1H
148.   K080180001635     41667   41666   41667   41667   41666   41667          2H
149.   K080180001635     41667   41666   41667   41667   41666   41667          3H
150.   K080180001635     41667   41666   41667   41667   41666   41667          4H
151.   K080180007503     1087                                                   D
152.   K080180007503                     30                                     S
153.   K080180007503                                                    11000   1H
154.   K080180007503    124500  234400  223500  216100  128200   55000          2H
155.   K080180007503     07300                                                  3H
156.   K080180007503                                                            4H
157.   K314900009501     1087                                                   D
158.   K314900009501    35      15      35      15                              S
159.   K314900009501     26785   26785   26785   26785   44643   44643          1H
160.   K314900009501     44643   44643   44643   44643   44643   44643          2H
161.   K314900009501     44643   44643   44643   44643   44643   44643          3H
162.   K314900009501     44643   44643   44643   44643   44643   44643          4H
163.   K314900009502     1087                                                   D
164.   K314900009502    35      15      35      15                              S
165.   K314900009502     26785   26785   26785   26785   44643   44643          1H
166.   K314900009502     44643   44643   44643   44643   44643   44643          2H
167.   K314900009502     44643   44643   44643   44643   44643   44643          3H
168.   K314900009502     44643   44643   44643   44643   44643   44643          4H
169.   K314900009503     1087                                                   D
170.   K314900009503    35      15      35      15                              S
171.   K314900009503     26785   26785   26785   26785   44643   44643          1H
172.   K314900009503     44643   44643   44643   44643   44643   44643          2H
173.   K314900009503     44643   44643   44643   44643   44643   44643          3H
174.   K314900009503     44643   44643   44643   44643   44643   44643          4H
175.   K314900009504     1087                                                   D
176.   K314900009504    35      15      35      15                              S
177.   K314900009504     26785   26785   26785   26785   44643   44643          1H
178.   K314900009504     44643   44643   44643   44643   44643   44643          2H
179.   K314900009504     44643   44643   44643   44643   44643   44643          3H
180.   K314900009504     44643   44643   44643   44643   44643   44643          4H
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181.    K314900009505     1087                                                        D
182.    K314900009505    35     15     35     15                                      S
183.    K314900009505     26785  26785  26785  26785  44643  44643                    1H
184.    K314900009505     44643  44643  44643  44643  44643  44643                    2H
185.    K314900009505     44643  44643  44643  44643  44643  44643                    3H
186.    K314900009505     44643  44643  44643  44643  44643  44643                    4H
187.    K314900009506     1087                                                        D
188.    K314900009506    35     15     35     15                                      S
189.    K314900009506     26785  26785  26785  26785  44643  44643                    1H
190.    K314900009506     44643  44643  44643  44643  44643  44643                    2H
191.    K314900009506     44643  44643  44643  44643  44643  44643                    3H
192.    K314900009506     44643  44643  44643  44643  44643  44643                    4H
193.    K314900009507     1087                                                        D
194.    K314900009507    35     15     35     15                                      S
195.    K314900009507     26785  26785  26785  26785  44643  44643                    1H
196.    K314900009507     44643  44643  44643  44643  44643  44643                    2H
197.    K314900009507     44643  44643  44643  44643  44643  44643                    3H
198.    K314900009507     44643  44643  44643  44643  44643  44643                    4H
199.    K314900009508     1087                                                        D
200.    K314900009508    35     15     35     15                                      S
201.    K314900009508     26785  26785  26785  26785  44643  44643                    1H
202.    K314900009508     44643  44643  44643  44643  44643  44643                    2H
203.    K314900009508     44643  44643  44643  44643  44643  44643                    3H
204.    K314900009508     44643  44643  44643  44643  44643  44643                    4H
205.    K314900009510     1087                                                        D
206.    K314900009510    35     15     35     15                                      S
207.    K314900009510     26785  26785  26785  26785  44643  44643                    1H
208.    K314900009510     44643  44643  44643  44643  44643  44643                    2H
209.    K314900009510     44643  44643  44643  44643  44643  44643                    3H
210.    K314900009510     44643  44643  44643  44643  44643  44643                    4H
211.    K391200000601     10870                                                       D
212.    K391200000601                  19                                             S
213.    K391200000601                                           11000                 1H
214.    K391200000601    124500 234400 223500 216100 128200 55000                     2H
215.    K391200000601     07300                                                       3H
216.    K391200000601                                                                 4H
217.    K391200000602     10870                                                       D
218.    K391200000602                  19                                             S
219.    K391200000602                                           11000                 1H
220.    K391200000602    124500 234400 223500 216100 128200 55000                     2H
221.    K391200000602     07300                                                       3H
222.    K391200000602                                                                 4H
223.    K391200000603     10870                                                       D
224.    K391200000603                  19                                             S
225.    K391200000603                                           11000                 1H
226.    K391200000603    124500 234400 223500 216100 128200 55000                     2H
227.    K391200000603     07300                                                       3H
228.    K391200000603                                                                 4H
229.    K391200000604     10870                                                       D
230.    K391200000604                  19                                             S
231.    K391200000604                                           11000                 1H
232.    K391200000604    124500 234400 223500 216100 128200 55000                     2H
233.    K391200000604     07300                                                       3H
234.    K391200000604                                                                 4H
235.    K391200000605     10870                                                       D
236.    K391200000605                  19                                             S
237.    K391200000605                                           11000                 1H
238.    K391200000605    124500 234400 223500 216100 128200 55000                     2H
239.    K391200000605     07300                                                       3H
240.    K391200000605                                                                 4H
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241.     K391200000715     10870                                                   D
242.     K391200000715                      52                                     S
243.     K391200000715                                                  11000      1H
244.     K391200000715     124500 234400 223500 216100 128200   55000      2H
245.     K391200000715     07300                                                   3H
246.     K391200000715                                                             4H
247.     K391660000302     10870                                                   D
248.     K391660000302                      33                                     S
249.     K391660000302                                                  11000      1H
250.     K391660000302     124500 234400 223500 216100 128200   55000      2H
251.     K391660000302     07300                                                   3H
252.     K391660000302                                                             4H
253.     K391660004001     10870                                                   D
254.     K391660004001                      41                                     S
255.     K391660004001                                                  11000      1H
256.     K391660004001     124500 234400 223500 216100 128200   55000      2H
257.     K391660004001     07300                                                   3H
258.     K391660004001                                                             4H
259.     K391660004002     10870                                                   D
260.     K391660004002                      41                                     S
261.     K391660004002                                                  11000      1H
262.     K391660004002     124500 234400 223500 216100 128200   55000      2H
263.     K391660004002     07300                                                   3H
264.     K391660004002                                                             4H
265.     K391660004003     10870                                                   D
266.     K391660004003                      50                                     S
267.     K391660004003                                                  11000      1H
268.     K391660004003     124500 234400 223500 216100 128200   55000      2H
269.     K391660004003     07300                                                   3H
270.     K391660004003                                                             4H
271.     K391660004004     10870                                                   D
272.     K391660004004                      41                                     S
273.     K391660004004                                                  11000      1H
274.     K391660004004     124500 234400 223500 216100 128200   55000      2H
275.     K391660004004     07300                                                   3H
276.     K391660004004                                                             4H
277.     K391660004005     10870                                                   D
278.     K391660004005                      50                                     S
279.     K391660004005                                                  11000      1H
280.     K391660004005     124500 234400 223500 216100 128200   55000      2H
281.     K391660004005     07300                                                   3H
282.     K391660004005                                                             4H
283.     K391660004006     10870                                                   D
284.     K391660004006                      44                                     S
285.     K391660004006                                                  11000      1H
286.     K391660004006     124500 234400 223500 216100 128200   55000      2H
287.     K391660004006     07300                                                   3H
288.     K391660004006                                                             4H
289.     K392360002603     10870                                                   D
290.     K392360002603                      33                                     S
291.     K392360002603                                                  11000      1H
292.     K392360002603     124500 234400 223500 216100 128200   55000      2H
293.     K392360002603     07300                                                   3H
294.     K392360002603                                                             4H
295.     K392360002001     10870                                                   D
296.     K392360002001                      43                                     S
297.     K392360002001                                                  11000      1H
298.     K392360002001     124500 234400 223500 216100 128200   55000      2H
299.     K392360002001     07300                                                   3H
300.     K392360002001                                                             4H
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302.   K392360002002                     48                                D
303.   K392360002002                                                       S
304.   K392360002002   124500 234400 223500 216100 128200  11000           1H
305.   K392360002002    07300                              55000           2H
306.   K392360002002                                                       3H
307.   K392360002003   10870                                               4H
308.   K392360002003                     48                                D
309.   K392360002003                                                       S
310.   K392360002003   124500 234400 223500 216100 128200  11000           1H
311.   K392360002003    07300                              55000           2H
312.   K392360002003                                                       3H
313.   K392360002004   10870                                               4H
314.   K392360002004                     48                                D
315.   K392360002004                                                       S
316.   K392360002004   124500 234400 223500 216100 128200  11000           1H
317.   K392360002004    07300                              55000           2H
318.   K392360002004                                                       3H
319.   K392360002005   10870                                               4H
320.   K392360002005                     51                                D
321.   K392360002005                                                       S
322.   K392360002005   124500 234400 223500 216100 128200  11000           1H
323.   K392360002005    07300                              55000           2H
324.   K392360002005                                                       3H
325.   K392360002006   10870                                               4H
326.   K392360002006                     50                                D
327.   K392360002006                                                       S
328.   K392360002006   124500 234400 223500 216100 128200  11000           1H
329.   K392360002006    07300                              55000           2H
330.   K392360002006                                                       3H
331.   K392360002007   10870                                               4H
332.   K392360002007                     51                                D
333.   K392360002007                                                       S
334.   K392360002007   124500 234400 223500 216100 128200  11000           1H
335.   K392360002007    07300                              55000           2H
336.   K392360002007                                                       3H
337.   K392360002008   10870                                               4H
338.   K392360002008                     50                                D
339.   K392360002008                                                       S
340.   K392360002008   124500 234400 223500 216100 128200  11000           1H
341.   K392360002008    07300                              55000           2H
342.   K392360002008                                                       3H
343.   K392360002009   10870                                               4H
344.   K392360002009                     41                                D
345.   K392360002009                                                       S
346.   K392360002009   124500 234400 223500 216100 128200  11000           1H
347.   K392360002009    07300                              55000           2H
348.   K392360002009                                                       3H
349.   K392360002011   10870                                               4H
350.   K392360002011                     41                                D
351.   K392360002011                                                       S
352.   K392360002011   124500 234400 223500 216100 128200  11000           1H
353.   K392360002011    07300                              55000           2H
354.   K392360002011                                                       3H
355.   K392360002012   10870                                               4H
356.   K392360002012                     41                                D
357.   K392360002012                                                       S
358.   K392360002012   124500 234400 223500 216100 128200  11000           1H
359.   K392360002012    07300                              55000           2H
360.   K392360002012                                                       3H
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361.    K392360002013    10870                                              D
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363.    K392360002013                                    11000          1H
364.    K392360002013   124500 234400 223500 216100 128200  55000          2H
365.    K392360002013    07300                                             3H
366.    K392360002013                                                      4H
367.    K392360002014    10870                                              D
368.    K392360002014                   31                                  S
369.    K392360002014                                    11000          1H
370.    K392360002014   124500 234400 223500 216100 128200  55000          2H
371.    K392360002014    07300                                             3H
372.    K392360002014                                                      4H
373.    K392360002015    10870                                              D
374.    K392360002015                   41                                  S
375.    K392360002015                                    11000          1H
376.    K392360002015   124500 234400 223500 216100 128200  55000          2H
377.    K392360002015    07300                                             3H
378.    K392360002015                                                      4H
379.    K392360002016    10870                                              D
380.    K392360002016                   31                                  S
381.    K392360002016                                    11000          1H
382.    K392360002016   124500 234400 223500 216100 128200  55000          2H
383.    K392360002016    07300                                             3H
384.    K392360002016                                                      4H
385.    K392360002017    10870                                              D
386.    K392360002017                   41                                  S
387.    K392360002017                                    11000          1H
388.    K392360002017   124500 234400 223500 216100 128200  55000          2H
389.    K392360002017    07300                                             3H
390.    K392360002017                                                      4H
391.    K392360002018    10870                                              D
392.    K392360002018                   31                                  S
393.    K392360002018                                    11000          1H
394.    K392360002018   124500 234400 223500 216100 128200  55000          2H
395.    K392360002018    07300                                             3H
396.    K392360002018                                                      4H
397.    K392360002019    10870                                              D
398.    K392360002019                   55                                  S
399.    K392360002019                                    11000          1H
400.    K392360002019   124500 234400 223500 216100 128200  55000          2H
401.    K392360002019    07300                                             3H
402.    K392360002019                                                      4H
403.    K392360002021    10870                                              D
404.    K392360002021                   51                                  S
405.    K392360002021                                    11000          1H
406.    K392360002021   124500 234400 223500 216100 128200  55000          2H
407.    K392360002021    07300                                             3H
408.    K392360002021                                                      4H
409.    K392360000502    10870                                              D
410.    K392360000502                   33                                  S
411.    K392360000502                                    11000          1H
412.    K392360000502   124500 234400 223500 216100 128200  55000          2H
413.    K392360000502    07300                                             3H
414.    K392360000502                                                      4H
415.    K392360000503    10870                                              D
416.    K392360000503                   33                                  S
417.    K392360000503                                    11000          1H
418.    K392360000503   124500 234400 223500 216100 128200  55000          2H
419.    K392360000503    07300                                             3H
420.    K392360000503                                                      4H
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421.    K392360000504      10870                                                    D
422.    K392360000504                     33                                        S
423.    K392360000504                                               11000           1H
424.    K392360000504     124500 234400 223500 216100 128200        55000           2H
425.    K392360000504      07300                                                    3H
426.    K392360000504                                                               4H
427.    K392360000505      10870                                                    D
428.    K392360000505                     33                                        S
429.    K392360000505                                               11000           1H
430.    K392360000505     124500 234400 223500 216100 128200        55000           2H
431.    K392360000505      07300                                                    3H
432.    K392360000505                                                               4H
433.    K392360000512      10870                                                    D
434.    K392360000512                     33                                        S
435.    K392360000512                                               11000           1H
436.    K392360000512     124500 234400 223500 216100 128200        55000           2H
437.    K392360000512      07300                                                    3H
438.    K392360000512                                                               4H
439.    K392360001411      10870                                                    D
440.    K392360001411     25     25     25     25                                    S
441.    K392360001411      41667  41666  41667  41667  41666  41667                 1H
442.    K392360001411      41667  41666  41667  41667  41666  41667                 2H
443.    K392360001411      41667  41666  41667  41667  41666  41667                 3H
444.    K392360001411      41667  41666  41667  41667  41666  41667                 4H
445.    K392360001412      10870                                                    D
446.    K392360001412     25     25     25     25                                    S
447.    K392360001412      41667  41666  41667  41667  41666  41667                 1H
448.    K392360001412      41667  41666  41667  41667  41666  41667                 2H
449.    K392360001412      41667  41666  41667  41667  41666  41667                 3H
450.    K392360001412      41667  41666  41667  41667  41666  41667                 4H
451.    K392360001413      15152                                                    D
452.    K392360001413     291093 222815 217508 267534                               S
453.    K392360001413                                                               1H
454.    K392360001413                            84359  87873  87873                2H
455.    K392360001413      87873  87873  87873  87873  87873  87873                 3H
456.    K392360001413      87873  62390  62390                                      4H
457.    K392360001422      15152                                                    D
458.    K392360001422     291093 223815 217508 267584                               S
459.    K392360001422                                                               1H
460.    K392360001422                            84359  37873  87873                2H
461.    K392360001422      87873  87873  87873  87873  87873  87873                 3H
462.    K392360001422      87873  62390  62390                                      4H
463.    K392360002501      10870                                                    D
464.    K392360002501     248213 253728 253728 244331                               S
465.    K392360002501      41667  41666  41667  41667  41666  41667                 1H
466.    K392360002501      41667  41666  41667  41667  41666  41667                 2H
467.    K392360002501      41667  41666  41667  41667  41666  41667                 3H
468.    K392360002501      41667  41666  41667  41667  41666  41667                 4H
469.    K392360002502      10870                                                    D
470.    K392360002502     248213 253728 253728 244331                               S
471.    K392360002502      41667  41666  41667  41667  41666  41667                 1H
472.    K392360002502      41667  41666  41667  41667  41666  41667                 2H
473.    K392360002502      41667  41666  41667  41667  41666  41667                 3H
474.    K392360002502      41667  41666  41667  41667  41666  41667                 4H
475.    K392360002503      10870                                                    D
476.    K392360002503     248213 253728 253728 244331                               S
477.    K392360002503      41667  41666  41667  41667  41666  41667                 1H
478.    K392360002503      41667  41666  41667  41667  41666  41667                 2H
479.    K392360002503      41667  41666  41667  41667  41666  41667                 3H
480.    K392360002503      41667  41666  41667  41667  41666  41667                 4H
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481.   K392360002504      10870                                              D
482.   K392360002504     248213 253728 253728 244331                         S
483.   K392360002504      41667  41666  41667  41667  41666  41667          1H
484.   K392360002504      41667  41666  41667  41667  41666  41667          2H
485.   K392360002504      41667  41666  41667  41667  41666  41667          3H
486.   K392360002504      41667  41666  41667  41667  41666  41667          4H
487.   K392360002505      10870                                              D
488.   K392360002505     248213 253728 253728 244331                         S
489.   K392360002505      41667  41666  41667  41667  41666  41667          1H
490.   K392360002505      41667  41666  41667  41667  41666  41667          2H
491.   K392360002505      41667  41666  41667  41667  41666  41667          3H
492.   K392360002505      41667  41666  41667  41667  41666  41667          4H
493.   K392360002506      10870                                              D
494.   K392360002506     248213 253728 253728 244331                         S
495.   K392360002506      41667  41666  41667  41667  41666  41667          1H
496.   K392360002506      41667  41666  41667  41667  41666  41667          2H
497.   K392360002506      41667  41666  41667  41667  41666  41667          3H
498.   K392360002506      41667  41666  41667  41667  41666  41667          4H
499.   K392360002507      10870                                              D
500.   K392360002507     248213 253728 253728 244331                         S
501.   K392360002507      41667  41666  41667  41667  41666  41667          1H
502.   K392360002507      41667  41666  41667  41667  41666  41667          2H
503.   K392360002507      41667  41666  41667  41667  41666  41667          3H
504.   K392360002507      41667  41666  41667  41667  41666  41667          4H
505.   K392360002508      10870                                              D
506.   K392360002508     248213 253728 253728 244331                         S
507.   K392360002508      41667  41666  41667  41667  41666  41667          1H
508.   K392360002508      41667  41666  41667  41667  41666  41667          2H
509.   K392360002508      41667  41666  41667  41667  41666  41667          3H
510.   K392360002508      41667  41666  41667  41667  41666  41667          4H
511.   K392360002509      10870                                              D
512.   K392360002509     248213 253728 253728 244331                         S
513.   K392360002509      41667  41666  41667  41667  41666  41667          1H
514.   K392360002509      41667  41666  41667  41667  41666  41667          2H
515.   K392360002509      41667  41666  41667  41667  41666  41667          3H
516.   K392360002509      41667  41666  41667  41667  41666  41667          4H
517.   K392360002511      10870                                              D
518.   K392360002511     248213 253728 253728 244331                         S
519.   K392360002511      41667  41666  41667  41667  41666  41667          1H
520.   K392360002511      41667  41666  41667  41667  41666  41667          2H
521.   K392360002511      41667  41666  41667  41667  41666  41667          3H
522.   K392360002511      41667  41666  41667  41667  41666  41667          4H
523.   K392360002512      10870                                              D
524.   K392360002512     248213 253728 253728 244331                         S
525.   K392360002512      41667  41666  41667  41667  41666  41667          1H
526.   K392360002512      41667  41666  41667  41667  41666  41667          2H
527.   K392360002512      41667  41666  41667  41667  41666  41667          3H
528.   K392360002512      41667  41666  41667  41667  41666  41667          4H
529.   K392360002513      10870                                              D
530.   K392360002513     248213 253728 253728 244331                         S
531.   K392360002513      41667  41666  41667  41667  41666  41667          1H
532.   K392360002513      41667  41666  41667  41667  41666  41667          2H
533.   K392360002513      41667  41666  41667  41667  41666  41667          3H
534.   K392360002513      41667  41666  41667  41667  41666  41667          4H
535.   K392360002514      10870                                              D
536.   K392360002514     248213 253728 253728 244331                         S
537.   K392360002514      41667  41666  41667  41667  41666  41667          1H
538.   K392360002514      41667  41666  41667  41667  41666  41667          2H
539.   K392360002514      41667  41666  41667  41667  41666  41667          3H
540.   K392360002514      41667  41666  41667  41667  41666  41667          4H
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541.   K392360002516    10870                                                D
542.   K392360002516   248213 253728 253728 244331                           S
543.   K392360002516    41667  41666  41667  41667  41666  41667             1H
544.   K392360002516    41667  41666  41667  41667  41666  41667             2H
545.   K392360002516    41667  41666  41667  41667  41666  41667             3H
546.   K392360002516    41667  41666  41667  41667  41666  41667             4H
547.   K392360003001    10870                                                D
548.   K392360003001   250700 239400 256400 253500                           S
549.   K392360003001    41667  41666  41667  41667  41666  41667             1H
550.   K392360003001    41667  41666  41667  41667  41666  41667             2H
551.   K392360003001    41667  41666  41667  41667  41666  41667             3H
552.   K392360003001    41667  41666  41667  41667  41666  41667             4H
553.   K392360003002    10870                                                D
554.   K392360003002   250700 239400 256400 253500                           S
555.   K392360003002    41667  41666  41667  41667  41666  41667             1H
556.   K392360003002    41667  41666  41667  41667  41666  41667             2H
557.   K392360003002    41667  41666  41667  41667  41666  41667             3H
558.   K392360003002    41667  41666  41667  41667  41666  41667             4H
559.   K392360003003    10870                                                D
560.   K392360003003   250700 239400 256400 253500                           S
561.   K392360003003    41667  41666  41667  41667  41666  41667             1H
562.   K392360003003    41667  41666  41667  41667  41666  41667             2H
563.   K392360003003    41667  41666  41667  41667  41666  41667             3H
564.   K392360003003    41667  41666  41667  41667  41666  41667             4H
565.   K392360003004    10870                                                D
566.   K392360003004   250700 239400 256400 253500                           S
567.   K392360003004    41667  41666  41667  41667  41666  41667             1H
568.   K392360003004    41667  41666  41667  41667  41666  41667             2H
569.   K392360003004    41667  41666  41667  41667  41666  41667             3H
570.   K392360003004    41667  41666  41667  41667  41666  41667             4H
571.   K392360003005    10870                                                D
572.   K392360003005   250700 239400 256400 253500                           S
573.   K392360003005    41667  41666  41667  41667  41666  41667             1H
574.   K392360003005    41667  41666  41667  41667  41666  41667             2H
575.   K392360003005    41667  41666  41667  41667  41666  41667             3H
576.   K392360003005    41667  41666  41667  41667  41666  41667             4H
577.   K392360003006    10870                                                D
578.   K392360003006   250700 239400 256400 253500                           S
579.   K392360003006    41667  41666  41667  41667  41666  41667             1H
580.   K392360003006    41667  41666  41667  41667  41666  41667             2H
581.   K392360003006    41667  41666  41667  41667  41666  41667             3H
582.   K392360003006    41667  41666  41667  41667  41666  41667             4H
583.   K392360003007    10870                                                D
584.   K392360003007   250700 239400 256400 253500                           S
585.   K392360003007    41667  41666  41667  41667  41666  41667             1H
586.   K392360003007    41667  41666  41667  41667  41666  41667             2H
587.   K392360003007    41667  41666  41667  41667  41666  41667             3H
588.   K392360003007    41667  41666  41667  41667  41666  41667             4H
589.   K392360003008    10870                                                D
590.   K392360003008   250700 239400 256400 253500                           S
591.   K392360003008    41667  41666  41667  41667  41666  41667             1H
592.   K392360003008    41667  41666  41667  41667  41666  41667             2H
593.   K392360003008    41667  41666  41667  41667  41666  41667             3H
594.   K392360003008    41667  41666  41667  41667  41666  41667             4H
595.   K392360003009    10870                                                D
596.   K392360003009   250700 239400 256400 253500                           S
597.   K392360003009    41667  41666  41667  41667  41666  41667             1H
598.   K392360003009    41667  41666  41667  41667  41666  41667             2H
599.   K392360003009    41667  41666  41667  41667  41666  41667             3H
600.   K392360003009    41667  41666  41667  41667  41666  41667             4H
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601.   K392360003011    10870                                               D
602.   K392360003011   250700 239400 256400 253500                          S
603.   K392360003011    41667  41666  41667  41667  41666  41667           1H
604.   K392360003011    41667  41666  41667  41667  41666  41667           2H
605.   K392360003011    41667  41666  41667  41667  41666  41667           3H
606.   K392360003011    41667  41666  41667  41667  41666  41667           4H
607.   K392360003012    10870                                               D
608.   K392360003012   250700 239400 256400 253500                          S
609.   K392360003012    41667  41666  41667  41667  41666  41667           1H
610.   K392360003012    41667  41666  41667  41667  41666  41667           2H
611.   K392360003012    41667  41666  41667  41667  41666  41667           3H
612.   K392360003012    41667  41666  41667  41667  41666  41667           4H
613.   K392360003013    10870                                               D
614.   K392360003013   250700 239400 256400 253500                          S
615.   K392360003013    41667  41666  41667  41667  41666  41667           1H
616.   K392360003013    41667  41666  41667  41667  41666  41667           2H
617.   K392360003013    41667  41666  41667  41667  41666  41667           3H
618.   K392360003013    41667  41666  41667  41667  41666  41667           4H
619.   K392360003014    10870                                               D
620.   K392360003014   250700 239400 256400 253500                          S
621.   K392360003014    41667  41666  41667  41667  41666  41667           1H
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623.   K392360003014    41667  41666  41667  41667  41666  41667           3H
624.   K392360003014    41667  41666  41667  41667  41666  41667           4H
625.   K392360003015    10870                                               D
626.   K392360003015   250700 239400 256400 253500                          S
627.   K392360003015    41667  41666  41667  41667  41666  41667           1H
628.   K392360003015    41667  41666  41667  41667  41666  41667           2H
629.   K392360003015    41667  41666  41667  41667  41666  41667           3H
630.   K392360003015    41667  41666  41667  41667  41666  41667           4H
631.   K392360003016    10870                                               D
632.   K392360003016   250700 239400 256400 253500                          S
633.   K392360003016    41667  41666  41667  41667  41666  41667           1H
634.   K392360003016    41667  41666  41667  41667  41666  41667           2H
635.   K392360003016    41667  41666  41667  41667  41666  41667           3H
636.   K392360003016    41667  41666  41667  41667  41666  41667           4H
637.   K392360003072    10870                                               D
638.   K392360003072   250700 239400 256400 253500                          S
639.   K392360003072    41667  41666  41667  41667  41666  41667           1H
640.   K392360003072    41667  41666  41667  41667  41666  41667           2H
641.   K392360003072    41667  41666  41667  41667  41666  41667           3H
642.   K392360003072    41667  41666  41667  41667  41666  41667           4H
643.   K392360003074    10870                                               D
644.   K392360003074   250700 239400 256400 253500                          S
645.   K392360003074    41667  41666  41667  41667  41666  41667           1H
646.   K392360003074    41667  41666  41667  41667  41666  41667           2H
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648.   K392360003074    41667  41666  41667  41667  41666  41667           4H
649.   K392360003076    10870                                               D
650.   K392360003076   250700 239400 256400 253500                          S
651.   K392360003076    41667  41666  41667  41667  41666  41667           1H
652.   K392360003076    41667  41666  41667  41667  41666  41667           2H
653.   K392360003076    41667  41666  41667  41667  41666  41667           3H
654.   K392360003076    41667  41666  41667  41667  41666  41667           4H
655.   K392360003078    10870                                               D
656.   K392360003078   250700 239400 256400 253500                          S
657.   K392360003078    41667  41666  41667  41667  41666  41667           1H
658.   K392360003078    41667  41666  41667  41667  41666  41667           2H
659.   K392360003078    41667  41666  41667  41667  41666  41667           3H
660.   K392360003078    41667  41666  41667  41667  41666  41667           4H
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661.    K392360003079    10870                                            D
662.    K392360003079   250700  239400  256400  253500                    S
663.    K392360003079    41667   41666   41667   41667   41666   41667    1H
664.    K392360003079    41667   41666   41667   41667   41666   41667    2H
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666.    K392360003079    41667   41666   41667   41667   41666   41667    4H
667.    K392360003081    10870                                            D
668.    K392360003081   250700  239400  256400  253500                    S
669.    K392360003081    41667   41666   41667   41667   41666   41667    1H
670.    K392360003081    41667   41666   41667   41667   41666   41667    2H
671.    K392360003081    41667   41666   41667   41667   41666   41667    3H
672.    K392360003081    41667   41666   41667   41667   41666   41667    4H
673.    K392360003082    10870                                            D
674.    K392360003082   250700  239400  256400  253500                    S
675.    K392360003082    41667   41666   41667   41667   41666   41667    1H
676.    K392360003082    41667   41666   41667   41667   41666   41667    2H
677.    K392360003082    41667   41666   41667   41667   41666   41667    3H
678.    K392360003082    41667   41666   41667   41667   41666   41667    4H
679.    K392360003083    10870                                            D
680.    K392360003083   250700  239400  256400  253500                    S
681.    K392360003083    41667   41666   41667   41667   41666   41667    1H
682.    K392360003083    41667   41666   41667   41667   41666   41667    2H
683.    K392360003083    41667   41666   41667   41667   41666   41667    3H
684.    K392360003083    41667   41666   41667   41667   41666   41667    4H
685.    K392360003085    10870                                            D
686.    K392360003085   250700  239400  256400  253500                    S
687.    K392360003085    41667   41666   41667   41667   41666   41667    1H
688.    K392360003085    41667   41666   41667   41667   41666   41667    2H
689.    K392360003085    41667   41666   41667   41667   41666   41667    3H
690.    K392360003085    41667   41666   41667   41667   41666   41667    4H
691.    K392360003086    10870                                            D
692.    K392360003086   250700  239400  256400  253500                    S
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694.    K392360003086    41667   41666   41667   41667   41666   41667    2H
695.    K392360003086    41667   41666   41667   41667   41666   41667    3H
696.    K392360003086    41667   41666   41667   41667   41666   41667    4H
697.    K392360003087    10870                                            D
698.    K392360003087   250700  239400  256400  253500                    S
699.    K392360003087    41667   41666   41667   41667   41666   41667    1H
700.    K392360003087    41667   41666   41667   41667   41666   41667    2H
701.    K392360003087    41667   41666   41667   41667   41666   41667    3H
702.    K392360003087    41667   41666   41667   41667   41666   41667    4H
703.    K392360003088    10870                                            D
704.    K392360003088   250700  239400  256400  253500                    S
705.    K392360003088    41667   41666   41667   41667   41666   41667    1H
706.    K392360003088    41667   41666   41667   41667   41666   41667    2H
707.    K392360003088    41667   41666   41667   41667   41666   41667    3H
708.    K392360003088    41667   41666   41667   41667   41666   41667    4H
709.    K392360003089    10870                                            D
710.    K392360003089   250700  239400  256400  253500                    S
711.    K392360003089    41667   41666   41667   41667   41666   41667    1H
712.    K392360003089    41667   41666   41667   41667   41666   41667    2H
713.    K392360003089    41667   41666   41667   41667   41666   41667    3H
714.    K392360003089    41667   41666   41667   41667   41666   41667    4H
715.    K392360003091    10870                                            D
716.    K392360003091   250700  239400  256400  253500                    S
717.    K392360003091    41667   41666   41667   41667   41666   41667    1H
718.    K392360003091    41667   41666   41667   41667   41666   41667    2H
719.    K392360003091    41667   41666   41667   41667   41666   41667    3H
720.    K392360003091    41667   41666   41667   41667   41666   41667    4H
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721.   K392360003093    10370                                          D
722.   K392360003093   250700 239400 256400 253500                     S
723.   K392360003093    41667  41666  41667  41667  41666  41667       1H
724.   K392360003093    41667  41666  41667  41667  41666  41667       2H
725.   K392360003093    41667  41666  41667  41667  41666  41667       3H
726.   K392360003093    41667  41666  41667  41667  41666  41667       4H
727.   K392360003095    10370                                          D
728.   K392360003095   250700 239400 256400 253500                     S
729.   K392360003095    41667  41666  41667  41667  41666  41667       1H
730.   K392360003095    41667  41666  41667  41667  41666  41667       2H
731.   K392360003095    41667  41666  41667  41667  41666  41667       3H
732.   K392360003095    41667  41666  41667  41667  41666  41667       4H
733.   K392360902509    10870                                          D
734.   K392360902509   248213 253728 253728 244331                     S
735.   K392360902509    41667  41666  41667  41667  41666  41667       1H
736.   K392360902509    41667  41666  41667  41667  41666  41667       2H
737.   K392360902509    41667  41666  41667  41667  41666  41667       3H
738.   K392360902509    41667  41666  41667  41667  41666  41667       4H
739.   K392360902512    10370                                          D
740.   K392360902512   248213 253728 253728 244331                     S
741.   K392360902512   .41667  41666  41667  41667  41666  41667       1H
742.   K392360902512    41667  41666  41667  41667  41666  41667       2H
743.   K392360902512    41667  41666  41667  41667  41666  41667       3H
744.   K392360902512    41667  41666  41667  41667  41666  41667       4H
745.   K392360902514    10870                                          D
746.   K392360902514   248213 253728 253728 244331                     S
747.   K392360902514    41667  41666  41667  41667  41666  41667       1H
748.   K392360902514    41667  41666  41667  41667  41666  41667       2H
749.   K392360902514    41667  41666  41667  41667  41666  41667       3H
750.   K392360902514    41667  41666  41667  41667  41666  41667       4H
751.   K392360902516    10370                                          D
752.   K392360902516   248213 253728 253728 244331                     S
753.   K392360902516    41667  41666  41667  41667  41666  41667       1H
754.   K392360902516    41667  41666  41667  41667  41666  41667       2H
755.   K392360902516    41667  41666  41667  41667  41666  41667       3H
756.   K392360902516    41667  41666  41667  41667  41666  41667       4H
757.   K392360902518    10870                                          D
758.   K392360902518   248213 253728 253728 244331                     S
759.   K392360902518    41667  41666  41667  41667  41666  41667       1H
760.   K392360902518    41667  41666  41667  41667  41666  41667       2H
761.   K392360902518    41667  41666  41667  41667  41666  41667       3H
762.   K392360902518    41667  41666  41667  41667  41666  41667       4H
763.   K392360902521    10870                                          D
764.   K392360902521   248213 253728 253728 244331                     S
765.   K392360902521    41667  41666  41667  41667  41666  41667       1H
766.   K392360902521    41667  41666  41667  41667  41666  41667       2H
767.   K392360902521    41667  41666  41667  41667  41666  41667       3H
768.   K392360902521    41667  41666  41667  41667  41666  41667       4H
769.   K392360902522    10370                                          D
770.   K392360902522   248213 253728 253728 244331                     S
771.   K392360902522    41667  41666  41667  41667  41666  41667       1H
772.   K392360902522    41667  41666  41667  41667  41666  41667       2H
773.   K392360902522    41667  41666  41667  41667  41666  41667       3H
774.   K392360902522    41667  41666  41667  41667  41666  41667       4H
775.   K392360902523    10870                                          D
776.   K392360902523   248213 253728 253728 244331                     S
777.   K392360902523    41667  41666  41667  41667  41666  41667       1H
778.   K392360902523    41667  41666  41667  41667  41666  41667       2H
779.   K392360902523    41667  41666  41667  41667  41666  41667       3H
780.   K392360902523    41667  41666  41667  41667  41666  41667       4H
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781.   K392360902524    10870                                                  D
782.   K392360902524   248213  253728  253728  244331                          S
783.   K392360902524    41667   41666   41667   41667   41666   41667         1H
784.   K392360902524    41667   41666   41667   41667   41666   41667         2H
785.   K392360902524    41667   41666   41667   41667   41666   41667         3H
786.   K392360902524    41667   41666   41667   41667   41666   41667         4H
787.   K392360902526    10370                                                  D
788.   K392360902526   248213  253728  253728  244331                          S
789.   K392360902526    41667   41666   41667   41667   41666   41667         1H
790.   K392360902526    41667   41666   41667   41667   41666   41667         2H
791.   K392360902526    41667   41666   41667   41667   41666   41667         3H
792.   K392360902526    41667   41666   41667   41667   41666   41667         4H
793.   K392360902528    10870                                                  D
794.   K392360902528   248213  253728  253728  244331                          S
795.   K392360902528    41667   41666   41667   41667   41666   41667         1H
796.   K392360902528    41667   41666   41667   41667   41666   41667         2H
797.   K392360902528    41667   41666   41667   41667   41666   41667         3H
798.   K392360902528    41667   41666   41667   41667   41666   41667         4H
799.   K392360902529    10870                                                  D
800.   K392360902529   248213  253728  253728  244331                          S
801.   K392360902529    41667   41666   41667   41667   41666   41667         1H
802.   K392360902529    41667   41666   41667   41667   41666   41667         2H
803.   K392360902529    41667   41666   41667   41667   41666   41667         3H
804.   K392360902529    41667   41666   41667   41667   41666   41667         4H
805.   K392360902531    10870                                                  D
806.   K392360902531   248213  253728  253728  244331                          S
807.   K392360902531    41667   41666   41667   41667   41666   41667         1H
808.   K392360902531    41667   41666   41667   41667   41666   41667         2H
809.   K392360902531    41667   41666   41667   41667   41666   41667         3H
810.   K392360902531    41667   41666   41667   41667   41666   41667         4H
811.   K392360902532    10870                                                  D
812.   K392360902532   248213  253728  253728  244331                          S
813.   K392360902532    41667   41666   41667   41667   41666   41667         1H
814.   K392360902532    41667   41666   41667   41667   41666   41667         2H
815.   K392360902532    41667   41666   41667   41667   41666   41667         3H
816.   K392360902532    41667   41666   41667   41667   41666   41667         4H
817.   K392360902533    10870                                                  D
818.   K392360902533   248213  253728  253728  244331                          S
819.   K392360902533    41667   41666   41667   41667   41666   41667         1H
820.   K392360902533    41667   41666   41667   41667   41666   41667         2H
821.   K392360902533    41667   41666   41667   41667   41666   41667         3H
822.   K392360902533    41667   41666   41667   41667   41666   41667         4H
823.   K392360902534    10870                                                  D
824.   K392360902534   248213  253728  253728  244331                          S
825.   K392360902534    41667   41666   41667   41667   41666   41667         1H
826.   K392360902534    41667   41666   41667   41667   41666   41667         2H
827.   K392360902534    41667   41666   41667   41667   41666   41667         3H
828.   K392360902534    41667   41666   41667   41667   41666   41667         4H
829.   K392360902535    10870                                                  D
830.   K392360902535   248213  253728  253728  244331                          S
831.   K392360902535    41667   41666   41667   41667   41666   41667         1H
832.   K392360902535    41667   41666   41667   41667   41666   41667         2H
833.   K392360902535    41667   41666   41667   41667   41666   41667         3H
834.   K392360902535    41667   41666   41667   41667   41666   41667         4H
835.   K392360902536    10870                                                  D
836.   K392360902536   248213  253728  253728  244331                          S
837.   K392360902536    41667   41666   41667   41667   41666   41667         1H
838.   K392360902536    41667   41666   41667   41667   41666   41667         2H
839.   K392360902536    41667   41666   41667   41667   41666   41667         3H
840.   K392360902536    41667   41666   41667   41667   41666   41667         4H
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841.   K392360902537    10870                                           D
842.   K392360902537   248213  253728  253728  244331                   S
843.   K392360902537    41667   41666   41667   41667   41666   41667   1H
844.   K392360902537    41667   41666   41667   41667   41666   41667   2H
845.   K392360902537    41667   41666   41667   41667   41666   41667   3H
846.   K392360902537    41667   41666   41667   41667   41666   41667   4H
847.   K392360902538    10870                                           D
848.   K392360902538   248213  253728  253728  244331                   S
849.   K392360902538    41667   41666   41667   41667   41666   41667   1H
850.   K392360902538    41667   41666   41667   41667   41666   41667   2H
851.   K392360902538    41667   41666   41667   41667   41666   41667   3H
852.   K392360902538    41667   41666   41667   41667   41666   41667   4H
853.   K392360902539    10870                                           D
854.   K392360902539   248213  253728  253728  244331                   S
855.   K392360902539    41667   41666   41667   41667   41666   41667   1H
856.   K392360902539    41667   41666   41667   41667   41666   41667   2H
857.   K392360902539    41667   41666   41667   41667   41666   41667   3H
858.   K392360902539    41667   41666   41667   41667   41666   41667   4H
859.   K392360902541    10870                                           D
860.   K392360902541   248213  253728  253728  244331                   S
861.   K392360902541    41667   41666   41667   41667   41666   41667   1H
862.   K392360902541    41667   41666   41667   41667   41666   41667   2H
863.   K392360902541    41667   41666   41667   41667   41666   41667   3H
864.   K392360902541    41667   41666   41667   41667   41666   41667   4H
865.   K392360902542    10870                                           D
866.   K392360902542   248213  253728  253728  244331                   S
867.   K392360902542    41667   41666   41667   41667   41666   41667   1H
868.   K392360902542    41667   41666   41667   41667   41666   41667   2H
869.   K392360902542    41667   41666   41667   41667   41666   41667   3H
870.   K392360902542    41667   41666   41667   41667   41666   41667   4H
871.   K392360902543    10870                                           D
872.   K392360902543   248213  253728  253728  244331                   S
873.   K392360902543    41667   41666   41667   41667   41666   41667   1H
874.   K392360902543    41667   41666   41667   41667   41666   41667   2H
875.   K392360902543    41667   41666   41667   41667   41666   41667   3H
876.   K392360902543    41667   41666   41667   41667   41666   41667   4H
877.   K392360902544    10870                                           D
878.   K392360902544   248213  253728  253728  244331                   S
879.   K392360902544    41667   41666   41667   41667   41666   41667   1H
880.   K392360902544    41667   41666   41667   41667   41666   41667   2H
881.   K392360902544    41667   41666   41667   41667   41666   41667   3H
882.   K392360902544    41667   41666   41667   41667   41666   41667   4H
883.   K392360902545    10870                                           D
884.   K392360902545   248213  253728  253728  244331                   S
885.   K392360902545    41667   41666   41667   41667   41666   41667   1H
886.   K392360902545    41667   41666   41667   41667   41666   41667   2H
887.   K392360902545    41667   41666   41667   41667   41666   41667   3H
888.   K392360902545    41667   41666   41667   41667   41666   41667   4H
889.   K392360902546    10870                                           D
890.   K392360902546   248213  253728  253728  244331                   S
891.   K392360902546    41667   41666   41667   41667   41666   41667   1H
892.   K392360902546    41667   41666   41667   41667   41666   41667   2H
893.   K392360902546    41667   41666   41667   41667   41666   41667   3H
894.   K392360902546    41667   41666   41667   41667   41666   41667   4H
895.   K392360902547    10870                                           D
896.   K392360902547   248213  253728  253728  244331                   S
897.   K392360902547    41667   41666   41667   41667   41666   41667   1H
898.   K392360902547    41667   41666   41667   41667   41666   41667   2H
899.   K392360902547    41667   41666   41667   41667   41666   41667   3H
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901.   K392360902548    10870                                                    D
902.   K392360902548   248213 253728 253728 244331                               S
903.   K392360902548    41667  41666  41667  41667  41666  41667                 1H
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905.   K392360902548    41667  41666  41667  41667  41666  41667                 3H
906.   K392360902548    41667  41666  41667  41667  41666  41667                 4H
907.   K392360902549    10870                                                    D
908.   K392360902549   248213 253728 253728 244331                               S
909.   K392360902549    41667  41666  41667  41667  41666  41667                 1H
910.   K392360902549    41667  41666  41667  41667  41666  41667                 2H
911.   K392360902549    41667  41666  41667  41667  41666  41667                 3H
912.   K392360902549    41667  41666  41667  41667  41666  41667                 4H
913.   K392360902551    10870                                                    D
914.   K392360902551   248213 253728 253728 244331                               S
915.   K392360902551    41667  41666  41667  41667  41666  41667                 1H
916.   K392360902551    41667  41666  41667  41667  41666  41667                 2H
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919.   K392360902552    10870                                                    D
920.   K392360902552   248213 253728 253728 244331                               S
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924.   K392360902552    41667  41666  41667  41667  41666  41667                 4H
925.   K392360902553    10870                                                    D
926.   K392360902553   248213 253728 253728 244331                               S
927.   K392360902553    41667  41666  41667  41667  41666  41667                 1H
928.   K392360902553    41667  41666  41667  41667  41666  41667                 2H
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930.   K392360902553    41667  41666  41667  41667  41666  41667                 4H
931.   K392360902554    10870                                                    D
932.   K392360902554   248213 253728 253728 244331                               S
933.   K392360902554    41667  41666  41667  41667  41666  41667                 1H
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937.   K392360902555    10870                                                    D
938.   K392360902555   248213 253728 253728 244331                               S
939.   K392360902555    41667  41666  41667  41667  41666  41667                 1H
940.   K392360902555    41667  41666  41667  41667  41666  41667                 2H
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943.   K392360902556    10870                                                    D
944.   K392360902556   248213 253728 253728 244331                               S
945.   K392360902556    41667  41666  41667  41667  41666  41667                 1H
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949.   K392360902557    10870                                                    D
950.   K392360902557   248213 253728 253728 244331                               S
951.   K392360902557    41667  41666  41667  41667  41666  41667                 1H
952.   K392360902557    41667  41666  41667  41667  41666  41667                 2H
953.   K392360902557    41667  41666  41667  41667  41666  41667                 3H
954.   K392360902557    41667  41666  41667  41667  41666  41667                 4H
955.   K392360902558    10870                                                    D
956.   K392360902558   248213 253728 253728 244331                               S
957.   K392360902558    41667  41666  41667  41667  41666  41667                 1H
958.   K392360902558    41667  41666  41667  41667  41666  41667                 2H
959.   K392360902558    41667  41666  41667  41667  41666  41667                 3H
960.   K392360902558    41667  41666  41667  41667  41666  41667                 4H
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 961.   K392360902559    10870                                            D
 962.   K392360902559   248213 253728 253728 244331                       S
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 974.   K392360902562   248213 253728 253728 244331                       S
 975.   K392360902562    41667  41666  41667  41667  41666  41667         1H
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 978.   K392360902562    41667  41666  41667  41667  41666  41667         4H
 979.   K392360902563    10870                                            D
 980.   K392360902563   248213 253728 253728 244331                       S
 981.   K392360902563    41667  41666  41667  41667  41666  41667         1H
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 984.   K392360902563    41667  41666  41667  41667  41666  41667         4H
 985.   K392360902564    10870                                            D
 986.   K392360902564   248213 253728 253728 244331                       S
 987.   K392360902564    41667  41666  41667  41667  41666  41667         1H
 988.   K392360902564    41667  41666  41667  41667  41666  41667         2H
 989.   K392360902564    41667  41666  41667  41667  41666  41667         3H
 990.   K392360902564    41667  41666  41667  41667  41666  41667         4H
 991.   K392360902565    10870                                            D
 992.   K392360902565   248213 253728 253728 244331                       S
 993.   K392360902565    41667  41666  41667  41667  41666  41667         1H
 994.   K392360902565    41667  41666  41667  41667  41666  41667         2H
 995.   K392360902565    41667  41666  41667  41667  41666  41667         3H
 996.   K392360902565    41667  41666  41667  41667  41666  41667         4H
 997.   K392360902566    10870                                            D
 998.   K392360902566   248213 253728 253728 244331                       S
 999.   K392360902566    41667  41666  41667  41667  41666  41667         1H
1000.   K392360902566    41667  41666  41667  41667  41666  41667         2H
1001.   K392360902566    41667  41666  41667  41667  41666  41667         3H
1002.   K392360902566    41667  41666  41667  41667  41666  41667         4H
1003.   K392360902567    10870                                            D
1004.   K392360902567   248213 253728 253728 244331                       S
1005.   K392360902567    41667  41666  41667  41667  41666  41667         1H
1006.   K392360902567    41667  41666  41667  41667  41666  41667         2H
1007.   K392360902567    41667  41666  41667  41667  41666  41667         3H
1008.   K392360902567    41667  41666  41667  41667  41666  41667         4H
1009.   K392360902568    10870                                            D
1010.   K392360902568   248213 253728 253728 244331                       S
1011.   K392360902568    41667  41666  41667  41667  41666  41667         1H
1012.   K392360902568    41667  41666  41667  41667  41666  41667         2H
1013.   K392360902568    41667  41666  41667  41667  41666  41667         3H
1014.   K392360902568    41667  41666  41667  41667  41666  41667         4H
1015.   K392360902569    10870                                            D
1016.   K392360902569   248213 253728 253728 244331                       S
1017.   K392360902569    41667  41666  41667  41667  41666  41667         1H
1018.   K392360902569    41667  41666  41667  41667  41666  41667         2H
1019.   K392360902569    41667  41666  41667  41667  41666  41667         3H
1020.   K392360902569    41667  41666  41667  41667  41666  41667         4H
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1021.     K392360902571      10870                                                         D
1022.     K392360902571     248213  253728  253728  244331                                 S
1023.     K392360902571      41667   41666   41667   41667   41666   41667                1H
1024.     K392360902571      41667   41666   41667   41667   41666   41667                2H
1025.     K392360902571      41667   41666   41667   41667   41666   41667                3H
1026.     K392360902571      41667   41666   41667   41667   41666   41667                4H
1027.     K392360902572      10870                                                         D
1028.     K392360902572     248213  253728  253728  244331                                 S
1029.     K392360902572      41667   41666   41667   41667   41666   41667                1H
1030.     K392360902572      41667   41666   41667   41667   41666   41667                2H
1031.     K392360902572      41667   41666   41667   41667   41666   41667                3H
1032.     K392360902572      41667   41666   41667   41667   41666   41667                4H
1033.     K392360902573      10870                                                         D
1034.     K392360902573     248213  253728  253728  244331                                 S
1035.     K392360902573      41667   41666   41667   41667   41666   41667                1H
1036.     K392360902573      41667   41666   41667   41667   41666   41667                2H
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1038.     K392360902573      41667   41666   41667   41667   41666   41667                4H
1039.     K392360902575      10870                                                         D
1040.     K392360902575     248213  253728  253728  244331                                 S
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1042.     K392360902575      41667   41666   41667   41667   41666   41667                2H
1043.     K392360902575      41667   41666   41667   41667   41666   41667                3H
1044.     K392360902575      41667   41666   41667   41667   41666   41667                4H
1045.     K392360902577      10870                                                         D
1046.     K392360902577     248213  253728  253728  244331                                 S
1047.     K392360902577      41667   41666   41667   41667   41666   41667                1H
1048.     K392360902577      41667   41666   41667   41667   41666   41667                2H
1049.     K392360902577      41667   41666   41667   41667   41666   41667                3H
1050.     K392360902577      41667   41666   41667   41667   41666   41667                4H
1051.     K392360902579      10870                                                         D
1052.     K392360902579     248213  253728  253728  244331                                 S
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1054.     K392360902579      41667   41666   41667   41667   41666   41667                2H
1055.     K392360902579      41667   41666   41667   41667   41666   41667                3H
1056.     K392360902579      41667   41666   41667   41667   41666   41667                4H
1057.     K392360902582      10870                                                         D
1058.     K392360902582     248213  253728  253728  244331                                 S
1059.     K392360902582      41667   41666   41667   41667   41666   41667                1H
1060.     K392360902582      41667   41666   41667   41667   41666   41667                2H
1061.     K392360902582      41667   41666   41667   41667   41666   41667                3H
1062.     K392360902582      41667   41666   41667   41667   41666   41667                4H
1063.     K392360902584      10870                                                         D
1064.     K392360902584     248213  253728  253728  244331                                 S
1065.     K392360902584      41667   41666   41667   41667   41666   41667                1H
1066.     K392360902584      41667   41666   41667   41667   41666   41667                2H
1067.     K392360902584      41667   41666   41667   41667   41666   41667                3H
1068.     K392360902584      41667   41666   41667   41667   41666   41667                4H
1069.     K392360902586      10870                                                         D
1070.     K392360902586     248213  253728  253728  244331                                 S
1071.     K392360902586      41667   41666   41667   41667   41666   41667                1H
1072.     K392360902586      41667   41666   41667   41667   41666   41667                2H
1073.     K392360902586      41667   41666   41667   41667   41666   41667                3H
1074.     K392360902586      41667   41666   41667   41667   41666   41667                4H
1075.     K397160151103      10870                                                         D
1076.     K397160151103     250000  250000  250000  250000                                 S
1077.     K397160151103      41667   41666   41667   41667   41666   41667                1H
1078.     K397160151103      41667   41666   41667   41667   41666   41667                2H
1079.     K397160151103      41667   41666   41667   41667   41666   41667                3H
1080.     K397160151103      41667   41666   41667   41667   41666   41667                4H
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1081.   K397160151107    10870                                   D
1082.   K397160151107   250000 250000 250000 250000              S
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1087.   K397160151109    10870                                   D
1088.   K397160151109   250000 250000 250000 250000              S
1089.   K397160151109    41667  41666  41667  41667  41666  41667  1H
1090.   K397160151109    41667  41666  41667  41667  41666  41667  2H
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1092.   K397160151109    41667  41666  41667  41667  41666  41667  4H
1093.   K397160151114    10870                                   D
1094.   K397160151114   250000 250000 250000 250000              S
1095.   K397160151114    41667  41666  41667  41667  41666  41667  1H
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1097.   K397160151114    41667  41666  41667  41667  41666  41667  3H
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1099.   K397160151120    10870                                   D
1100.   K397160151120   250000 250000 250000 250000              S
1101.   K397160151120    41667  41666  41667  41667  41666  41667  1H
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1103.   K397160151120    41667  41666  41667  41667  41666  41667  3H
1104.   K397160151120    41667  41666  41667  41667  41666  41667  4H
1105.   K397160151122    10870                                   D
1106.   K397160151122   250000 250000 250000 250000              S
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1108.   K397160151122    41667  41666  41667  41667  41666  41667  2H
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1110.   K397160151122    41667  41666  41667  41667  41666  41667  4H
1111.   K397160151128    10870                                   D
1112.   K397160151128   250000 250000 250000 250000              S
1113.   K397160151128    41667  41666  41667  41667  41666  41667  1H
1114.   K397160151128    41667  41666  41667  41667  41666  41667  2H
1115.   K397160151128    41667  41666  41667  41667  41666  41667  3H
1116.   K397160151128    41667  41666  41667  41667  41666  41667  4H
1117.   K397160151137    10870                                   D
1118.   K397160151137   250000 250000 250000 250000              S
1119.   K397160151137    41667  41666  41667  41667  41666  41667  1H
1120.   K397160151137    41667  41666  41667  41667  41666  41667  2H
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1122.   K397160151137    41667  41666  41667  41667  41666  41667  4H
1123.   K397160151149    10870                                   D
1124.   K397160151149   250000 250000 250000 250000              S
1125.   K397160151149    41667  41666  41667  41667  41666  41667  1H
1126.   K397160151149    41667  41666  41667  41667  41666  41667  2H
1127.   K397160151149    41667  41666  41667  41667  41666  41667  3H
1128.   K397160151149    41667  41666  41667  41667  41666  41667  4H
1129.   K397160151154    10870                                   D
1130.   K397160151154   250000 250000 250000 250000              S
1131.   K397160151154    41667  41666  41667  41667  41666  41667  1H
1132.   K397160151154    41667  41666  41667  41667  41666  41667  2H
1133.   K397160151154    41667  41666  41667  41667  41666  41667  3H
1134.   K397160151154    41667  41666  41667  41667  41666  41667  4H
1135.   K397160151156    10870                                   D
1136.   K397160151156   250000 250000 250000 250000              S
1137.   K397160151156    41667  41666  41667  41667  41666  41667  1H
1138.   K397160151156    41667  41666  41667  41667  41666  41667  2H
1139.   K397160151156    41667  41666  41667  41667  41666  41667  3H
1140.   K397160151156    41667  41666  41667  41667  41666  41667  4H
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1141.   K397160151158    10870                                          D
1142.   K397160151158   250000  250000  250000  250000                  S
1143.   K397160151158    41667   41666   41667   41667   41666   41667  1H
1144.   K397160151158    41667   41666   41667   41667   41666   41667  2H
1145.   K397160151158    41667   41666   41667   41667   41666   41667  3H
1146.   K397160151158    41667   41666   41667   41667   41666   41667  4H
1147.   K397160151160    10870                                          D
1148.   K397160151160   250000  250000  250000  250000                  S
1149.   K397160151160    41667   41666   41667   41667   41666   41667  1H
1150.   K397160151160    41667   41666   41667   41667   41666   41667  2H
1151.   K397160151160    41667   41666   41667   41667   41666   41667  3H
1152.   K397160151160    41667   41666   41667   41667   41666   41667  4H
1153.   K397160151164    10870                                          D
1154.   K397160151164   250000  250000  250000  250000                  S
1155.   K397160151164    41667   41666   41667   41667   41666   41667  1H
1156.   K397160151164    41667   41666   41667   41667   41666   41667  2H
1157.   K397160151164    41667   41666   41667   41667   41666   41667  3H
1158.   K397160151164    41667   41666   41667   41667   41666   41667  4H
1159.   K397160151171    10870                                          D
1160.   K397160151171   250000  250000  250000  250000                  S
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1162.   K397160151171    41667   41666   41667   41667   41666   41667  2H
1163.   K397160151171    41667   41666   41667   41667   41666   41667  3H
1164.   K397160151171    41667   41666   41667   41667   41666   41667  4H
1165.   K397160151172    10870                                          D
1166.   K397160151172   250000  250000  250000  250000                  S
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1168.   K397160151172    41667   41666   41667   41667   41666   41667  2H
1169.   K397160151172    41667   41666   41667   41667   41666   41667  3H
1170.   K397160151172    41667   41666   41667   41667   41666   41667  4H
1171.   K397160151173    10870                                          D
1172.   K397160151173   250000  250000  250000  250000                  S
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1174.   K397160151173    41667   41666   41667   41667   41666   41667  2H
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1177.   K397160151174    10870                                          D
1178.   K397160151174   250000  250000  250000  250000                  S
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1180.   K397160151174    41667   41666   41667   41667   41666   41667  2H
1181.   K397160151174    41667   41666   41667   41667   41666   41667  3H
1182.   K397160151174    41667   41666   41667   41667   41666   41667  4H
1183.   K397160151176    10870                                          D
1184.   K397160151176   250000  250000  250000  250000                  S
1185.   K397160151176    41667   41666   41667   41667   41666   41667  1H
1186.   K397160151176    41667   41666   41667   41667   41666   41667  2H
1187.   K397160151176    41667   41666   41667   41667   41666   41667  3H
1188.   K397160151176    41667   41666   41667   41667   41666   41667  4H
1189.   K397160151177    10870                                          D
1190.   K397160151177   250000  250000  250000  250000                  S
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1192.   K397160151177    41667   41666   41667   41667   41666   41667  2H
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1194.   K397160151177    41667   41666   41667   41667   41666   41667  4H
1195.   K397160151180    10870                                          D
1196.   K397160151180   250000  250000  250000  250000                  S
1197.   K397160151180    41667   41666   41667   41667   41666   41667  1H
1198.   K397160151180    41667   41666   41667   41667   41666   41667  2H
1199.   K397160151180    41667   41666   41667   41667   41666   41667  3H
1200.   K397160151180    41667   41666   41667   41667   41666   41667  4H
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1201.   K397160151181   10870                                      D
1202.   K397160151181  250000 250000 250000 250000                 S
1203.   K397160151181   41667  41666  41667  41667  41666  41667   1H
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1206.   K397160151181   41667  41666  41667  41667  41666  41667   4H
1207.   K397160151182   10870                                      D
1208.   K397160151182  250000 250000 250000 250000                 S
1209.   K397160151182   41667  41666  41667  41667  41666  41667   1H
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1212.   K397160151182   41667  41666  41667  41667  41666  41667   4H
1213.   K397160151183   10870                                      D
1214.   K397160151183  250000 250000 250000 250000                 S
1215.   K397160151183   41667  41666  41667  41667  41666  41667   1H
1216.   K397160151183   41667  41666  41667  41667  41666  41667   2H
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1218.   K397160151183   41667  41666  41667  41667  41666  41667   4H
1219.   K397160151184   10870                                      D
1220.   K397160151184  250000 250000 250000 250000                 S
1221.   K397160151184   41667  41666  41667  41667  41666  41667   1H
1222.   K397160151184   41667  41666  41667  41667  41666  41667   2H
1223.   K397160151184   41667  41666  41667  41667  41666  41667   3H
1224.   K397160151184   41667  41666  41667  41667  41666  41667   4H
1225.   K397160151185   10870                                      D
1226.   K397160151185  250000 250000 250000 250000                 S
1227.   K397160151185   41667  41666  41667  41667  41666  41667   1H
1228.   K397160151185   41667  41666  41667  41667  41666  41667   2H
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1230.   K397160151185   41667  41666  41667  41667  41666  41667   4H
1231.   K397160151186   10870                                      D
1232.   K397160151186  250000 250000 250000 250000                 S
1233.   K397160151186   41667  41666  41667  41667  41666  41667   1H
1234.   K397160151186   41667  41666  41667  41667  41666  41667   2H
1235.   K397160151186   41667  41666  41667  41667  41666  41667   3H
1236.   K397160151186   41667  41666  41667  41667  41666  41667   4H
1237.   K397160151187   10870                                      D
1238.   K397160151187  250000 250000 250000 250000                 S
1239.   K397160151187   41667  41666  41667  41667  41666  41667   1H
1240.   K397160151187   41667  41666  41667  41667  41666  41667   2H
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1242.   K397160151187   41667  41666  41667  41667  41666  41667   4H
1243.   K397160151188   10870                                      D
1244.   K397160151188  250000 250000 250000 250000                 S
1245.   K397160151188   41667  41666  41667  41667  41666  41667   1H
1246.   K397160151188   41667  41666  41667  41667  41666  41667   2H
1247.   K397160151188   41667  41666  41667  41667  41666  41667   3H
1248.   K397160151188   41667  41666  41667  41667  41666  41667   4H
1249.   K397160151190   10870                                      D
1250.   K397160151190  250000 250000 250000 250000                 S
1251.   K397160151190   41667  41666  41667  41667  41666  41667   1H
1252.   K397160151190   41667  41666  41667  41667  41666  41667   2H
1253.   K397160151190   41667  41666  41667  41667  41666  41667   3H
1254.   K397160151190   41667  41666  41667  41667  41666  41667   4H
1255.   K397160151191   10870                                      D
1256.   K397160151191  250000 250000 250000 250000                 S
1257.   K397160151191   41667  41666  41667  41667  41666  41667   1H
1258.   K397160151191   41667  41666  41667  41667  41666  41667   2H
1259.   K397160151191   41667  41666  41667  41667  41666  41667   3H
1260.   K397160151191   41667  41666  41667  41667  41666  41667   4H
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1261.    P     40300101     10870                                                D
1262.    P     40300101                  40                                      S
1263.    P     40300101                                        11000            1H
1264.    P     40300101    124500 234400 223500 216100 128200  55000            2H
1265.    P     40300101     07300                                               3H
1266.    P     40300101                                                         4H
1267.    P     40300102     10870                                                D
1268.    P     40300102                  35                                      S
1269.    P     40300102                                        11000            1H
1270.    P     40300102    124500 234400 223500 216100 128200  55000            2H
1271.    P     40300102     07300                                               3H
1272.    P     40300102                                                         4H
1273.    P     40300103     10870                                                D
1274.    P     40300103                  40                                      S
1275.    P     40300103                                        11000            1H
1276.    P     40300103    124500 234400 223500 216100 128200  55000            2H
1277.    P     40300103     07300                                               3H
1278.    P     40300103                                                         4H
1279.    P     40300104     10870                                                D
1280.    P     40300104                  35                                      S
1281.    P     40300104                                        11000            1H
1282.    P     40300104    124500 234400 223500 216100 128200  55000            2H
1283.    P     40300104     07300                                               3H
1284.    P     40300104                                                         4H
1285.    P     40300105     10870                                                D
1286.    P     40300105                  36                                      S
1287.    P     40300105                                        11000            1H
1288.    P     40300105    124500 234400 223500 216100 128200  55000            2H
1289.    P     40300105     07300                                               3H
1290.    P     40300105                                                         4H
1291.    P     40300106     10870                                                D
1292.    P     40300106                  38                                      S
1293.    P     40300106                                        11000            1H
1294.    P     40300106    124500 234400 223500 216100 128200  55000            2H
1295.    P     40300106     07300                                               3H
1296.    P     40300106                                                         4H
1297.    P     40300107     10870                                                D
1298.    P     40300107                  43                                      S
1299.    P     40300107                                        11000            1H
1300.    P     40300107    124500 234400 223500 216100 128200  55000            2H
1301.    P     40300107     07300                                               3H
1302.    P     40300107                                                         4H
1303.    P     40300150     10870                                                D
1304.    P     40300150                  36                                      S
1305.    P     40300150                                        11000            1H
1306.    P     40300150    124500 234400 223500 216100 128200  55000            2H
1307.    P     40300150     07300                                               3H
1308.    P     40300150                                                         4H
1309.    P     40300151     10870                                                D
1310.    P     40300151                  38                                      S
1311.    P     40300151                                        11000            1H
1312.    P     40300151    124500 234400 223500 216100 128200  55000            2H
1313.    P     40300151     07300                                               3H
1314.    P     40300151                                                         4H
1315.    P     40300152     10870                                                D
1316.    P     40300152                  43                                      S
1317.    P     40300152                                        11000            1H
1318.    P     40300152    124500 234400 223500 216100 128200  55000            2H
1319.    P     40300152     07300                                               3H
1320.    P     40300152                                                         4H
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1321.   P   40300161   10870                                                   D
1322.   P   40300161                 43                                        S
1323.   P   40300161                                                 11000     1H
1324.   P   40300161   124500 234400 223500 216100 128200            55000     2H
1325.   P   40300161   07300                                                   3H
1326.   P   40300161                                                           4H
1327.   P   40300198   10870                                                   D
1328.   P   40300198                 35                                        S
1329.   P   40300198                                                 11000     1H
1330.   P   40300198   124500 234400 223500 216100 128200            55000     2H
1331.   P   40300198   07300                                                   3H
1332.   P   40300198                                                           4H
1333.   P   40300199   10870                                                   D
1334.   P   40300199                 36                                        S
1335.   P   40300199                                                 11000     1H
1336.   P   40300199   124500 234400 223500 216100 128200            55000     2H
1337.   P   40300199   07300                                                   3H
1338.   P   40300199                                                           4H
1339.   P   40300201   10870                                                   D
1340.   P   40300201                 40                                        S
1341.   P   40300201                                                 11000     1H
1342.   P   40300201   124500 234400 223500 216100 128200            55000     2H
1343.   P   40300201   07300                                                   3H
1344.   P   40300201                                                           4H
1345.   P   40300202   10870                                                   D
1346.   P   40300202                 40                                        S
1347.   P   40300202                                                 11000     1H
1348.   P   40300202   124500 234400 223500 216100 128200            55000     2H
1349.   P   40300202   07300                                                   3H
1350.   P   40300202                                                           4H
1351.   P   40300203   10870                                                   D
1352.   P   40300203                 35                                        S
1353.   P   40300203                                                 11000     1H
1354.   P   40300203   124500 234400 223500 216100 128200            55000     2H
1355.   P   40300203   07300                                                   3H
1356.   P   40300203                                                           4H
1357.   P   40300205   10870                                                   D
1358.   P   40300205                 36                                        S
1359.   P   40300205                                                 11000     1H
1360.   P   40300205   124500 234400 223500 216100 128200            55000     2H
1361.   P   40300205   07300                                                   3H
1362.   P   40300205                                                           4H
1363.   P   40300206   10870                                                   D
1364.   P   40300206                 38                                        S
1365.   P   40300206                                                 11000     1H
1366.   P   40300206   124500 234400 223500 216100 128200            55000     2H
1367.   P   40300206   07300                                                   3H
1368.   P   40300206                                                           4H
1369.   P   40300207   10870                                                   D
1370.   P   40300207                 43                                        S
1371.   P   40300207                                                 11000     1H
1372.   P   40300207   124500 234400 223500 216100 128200            55000     2H
1373.   P   40300207   07300                                                   3H
1374.   P   40300207                                                           4H
1375.   P   40300208   10870                                                   D
1376.   P   40300208                 43                                        S
1377.   P   40300208                                                 11000     1H
1378.   P   40300208   124500 234400 223500 216100 128200            55000     2H
1379.   P   40300208   07300                                                   3H
1380.   P   40300208                                                           4H
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1381.      P    40300212       10870                                                        D
1382.      P    40300212                     36                                             S
1383.      P    40300212                                           11000                   1H
1384.      P    40300212      124500 234400 223500 216100 128200   55000                   2H
1385.      P    40300212       07300                                                       3H
1386.      P    40300212                                                                   4H
1387.      P    40300216       10870                                                        D
1388.      P    40300216                     43                                             S
1389.      P    40300216                                           11000                   1H
1390.      P    40300216      124500 234400 223500 216100 128200   55000                   2H
1391.      P    40300216       07300                                                       3H
1392.      P    40300216                                                                   4H
1393.      P    40300299       10870                                                        D
1394.      P    40300299                     36                                             S
1395.      P    40300299                                           11000                   1H
1396.      P    40300299      124500 234400 223500 216100 128200   55000                   2H
1397.      P    40300299       07300                                                       3H
1398.      P    40300299                                                                   4H
1399.      P    40300302       10870                                                        D
1400.      P    40300302                     40                                             S
1401.      P    40300302                                           11000                   1H
1402.      P    40300302      124500 234400 223500 216100 128200   55000                   2H
1403.      P    40300302       07300                                                       3H
1404.      P    40300302                                                                   4H
1405.      P    40400101       10870                                                        D
1406.      P    40400101                     40                                             S
1407.      P    40400101                                           11000                   1H
1408.      P    40400101      124500 234400 223500 216100 128200   55000                   2H
1409.      P    40400101       07300                                                       3H
1410.      P    40400101                                                                   4H
1411.      P    40400199       10870                                                        D
1412.      P    40400199                     40                                             S
1413.      P    40400199                                           11000                   1H
1414.      P    40400199      124500 234400 223500 216100 128200   55000                   2H
1415.      P    40400199       07300                                                       3H
1416.      P    40400199                                                                   4H
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123456789A123456789B123456789C123456789D123456789E123456789F123456789G123456789H
                    ▲         ▲         ▲         ▲         ▲         ▲
P    90100111       1087
P    90100111      56        25        1         18                                    D
P    90100111       33        32        32        32        33        38               S
P    90100111       45        48        48        51        50        49              1H
P    90100111       48        46        45        44        44        45              2H
P    90100111       43        41        40        39        37        35              3H
P    90100330       1087                                                              4H
P    90100330      56        25        1         18                                    D
P    90100330       33        32        32        32        33        38               S
P    90100330       45        48        48        51        50        49              1H
P    90100330       48        46        45        44        44        45              2H
P    90100330       43        41        40        39        37        35              3H
P    90100500       1087                                                              4H
P    90100500      4811      2946      889       1354                                  D
P    90100500       33        32        32        32        33        38               S
P    90100500       45        48        48        51        50        49              1H
P    90100500       48        46        45        44        44        45              2H
P    90100500       43        41        40        39        37        35              3H
P    90100600       1087                                                              4H
P    90100600      60        20        0         20                                    D
P    90100600      0         0         0         0         0         1                 S
P    90100600      6         6         6         6         6         6                1H
P    90100600      6         6         6         6         6         6                2H
P    90100600      6         6         6         6         3         0                3H
P    90200111       137                                                               4H
P    90200111      56        25        1         18                                    D
P    90200111      3         3         3         3         3         4                 S
P    90200111      4         5         5         6         6         6                1H
P    90200111      6         6         5         5         4         4                2H
P    90200111      4         3         3         3         3         3                3H
P    90200222       137                                                               4H
P    90200222      56        25        1         18                                    D
P    90200222      3         3         3         3         3         4                 S
P    90200222      4         5         5         6         6         6                1H
P    90200222      6         6         5         5         4         4                2H
P    90200222      4         3         3         3         3         3                3H
P    90200330       137                                                               4H
P    90200330      43        30        12        15                                    D
P    90200330      3         3         3         3         3         4                 S
P    90200330      4         5         5         6         6         6                1H
P    90200330      6         6         5         5         4         4                2H
P    90200330      4         3         3         3         3         3                3H
P    90200440       137                                                               4H
P    90200440      43        30        12        15                                    D
P    90200440      3         3         3         3         3         4                 S
P    90200440      4         5         5         6         6         6                1H
P    90200440      6         6         5         5         4         4                2H
P    90200440      4         3         3         3         3         3                3H
P    90200500       137                                                               4H
P    90200500      3896      2371      1953      1280                                  D
P    90200500       33        32        32        32        33        38               S
P    90200500       45        48        48        51        50        49              1H
P    90200500       48        46        45        44        44        45              2H
P    90200500       43        41        40        39        37        35              3H
P    90300222       1282                                                              4H
P    90300222      30        29        19        22                                    D
P    90300222       35        4         45        5         55        55               S
P    90300222       55        55        6         6         6         6                1H
P    90300222       6         5         4         3         3         25               2H
P    90300222       2         2         2         2         25        3                3H
                                                                                      4H
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P   90300330      1282                                        D
P   90300330     30     29     19     22                      S
P   90300330      35     4      45     5      55     55       1H
P   90300330      55     55     6      6      6      6        2H
P   90300330      6      5      4      3      3      25       3H
P   90300330      2      2      2      2      25     3        4H
P   90300440      1232                                        D
P   90300440     30     29     19     22                      S
P   90300440      35     4      45     5      55     55       1H
P   90300440      55     55     6      6      6      6        2H
P   90300440      6      5      4      3      3      25       3H
P   90300440      2      2      2      2      25     3        4H
P   90300500      1282                                        D
P   90300500     2500   2607   2631   2262                    S
P   90300500      35     4      45     5      55     55       1H
P   90300500      55     55     6      6      6      6        2H
P   90300500      6      5      4      3      3      25       3H
P   90300500      2      2      2      2      25     3        4H
P   90401100      1385                                        D
P   90401100     25     25     25     25                      S
P   90401100      0      0      0      0      0      1        1H
P   90401100      1      10     10     10     10     10       2H
P   90401100      10     10     10     10     7      1        3H
P   90401100      0      0      0      0      0      0        4H
P   90401200      1087                                        D
P   90401200                    33                            S
P   90401200      0      0      0      0      0      0        1H
P   90401200      83     83     83     83     83     83       2H
P   90401200      83     83     83     83     83     83       3H
P   90401200      0      0      0      0      0      0        4H
P   90401300      1515                                        D
P   90401300     25     25     25     25                      S
P   90401300      0      0      0      0      0      0        1H
P   90401300      0      111    111    111    111    111      2H
P   90401300      111    111    111    111    0      0        3H
P   90401300      0      0      0      0      0      0        4H
P   90501100      1266                                        D
P   90501100     20     25     30     25                      S
P   90501100      0      0      0      0      0      0        1H
P   90501100      89     89     89     39     89     89       2H
P   90501100      89     89     89     31     28     28       3H
P   90501100      28     28     28     28     0      0        4H
P   90501200      1266                                        D
P   90501200     25     25     25     25                      S
P   90501200      0      0      0      0      0      0        1H
P   90501200      89     89     39     89     89     89       2H
P   90501200      89     89     89     31     28     28       3H
P   90501200      28     28     28     28     0      0        4H
P   90501300      1266                                        D
P   90501300     25     25     25     25                      S
P   90501300      0      0      0      0      0      0        1H
P   90501300      89     89     89     89     89     89       2H
P   90501300      89     89     89     31     28     28       3H
P   90501300      28     28     28     28     0      0        4H
P   90600700      1282                                        D
P   90600700     0      35     20     45                      S
P   90600700      0      0      0      0      0      1        1H
P   90600700      7      7      7      7      7      7        2H
P   90600700      7      7      7      7      7      7        3H
P   90600700      7      7      1      0      0      0        4H
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P  90600800  1408                                   D
P  90600800  0     333   334   333                  S
P  90600800  0     0     0     0     0     0        1H
P  90600800  83    83    83    83    83    83       2H
P  90600800  83    83    83    83    83    83       3H
P  90600800                    0     0     0        4H
P  90600900  761                                    D
P  90600900  0     15    65    20                   S
P  90600900  0     0     0     0     0     0        1H
P  90600900  0     0     10    10    10    10       2H
P  90600900  10    10    10    10    10    10       3H
P  90600900  0     0     0     0     0     0        4H
P  90700700  1282                                   D
P  90700700  0     35    20    45                   S
P  90700700  0     0     0     0     0     1        1H
P  90700700  7     7     7     7     7     7        2H
P  90700700  7     7     7     7     7     7        3H
P  90700700  7     7     1     0     0     0        4H
P  90700800  1402                                   D
P  90700800  0     333   334   333                  S
P  90700800  0     0     0     0     0     0        1H
P  90700800  83    83    83    83    83    83       2H
P  90700800  83    83    83    83    83    83       3H
P  90700800  0     0     0     0     0     0        4H
P  90702400  1204                                   D
P  90702400  25    25    25    25                   S
P  90702400  356   356   356   356   356   356      1H
P  90702400  356   356   356   356   356   356      2H
P  90702400  356   356   356   356   356   6        3H
P  90702400  6     6     6     6     6     356      4H
P  90803100  1087                                   D
P  90803100  25    25    25    25                   S
P  90803100  3     3     3     4     4     4        1H
P  90803100  5     5     5     5     5     5        2H
P  90803100  5     5     5     5     5     5        3H
P  90803100  4     3     3     3     3     3        4H
P  90803200  761                                    D
P  90803200  25    25    25    25                   S
P  90803200  0     0     0     0     0     0        1H
P  90803200  0     1     3     6     8     8        2H
P  90803200  8     3     8     8     8     8        3H
P  90803200  8     8     6     3     1     0        4H
P  90803300  1087                                   D
P  90803300  25    25    25    25                   S
P  90803300  2     1     1     1     1     1        1H
P  90803300  2     2     3     4     4     5        2H
P  90803300  5     6     7     7     7     7        3H
P  90803300  7     7     7     6     4     3        4H
P  90900440  1087                                   D
P  90900440  25    25    25    25                   S
P  90900440  416   416   416   416   416   416      1H
P  90900440  416   416   416   416   416   416      2H
P  90900440  416   416   416   416   416   416      3H
P  90900440  416   416   416   416   416   416      4H
P  90904230  1037                                   D
P  90904230  25    25    25    25                   S
P  90904230  416   416   416   416   416   416      1H
P  90904230  416   416   416   416   416   416      2H
P  90904230  416   416   416   416   416   416      3H
P  90904230  416   416   416   416   416   416      4H
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P   90904430     761                                              D
P   90904430     0     25    50    25                             S
P   90904430     208   208   208   208   208   625              1H
P   90904430     625   625   625   625   625   625              2H
P   90904430     625   625   625   625   625   208              3H
P   90904430     208   208   208   208   208   208              4H
P   91000600     1515                                             D
P   91000600     0     333   333   333                            S
P   91000600     0     0     0     0     0     0                1H
P   91000600     83    83    83    83    83    83               2H
P   91000600     83    83    83    83    83    83               3H
P   91000600     0     0     0     0     0     0                4H
P   91000700     1087                                             D
P   91000700     25    25    25    25                             S
P   91000700     416   416   416   416   416   416              1H
P   91000700     416   416   416   416   416   416              2H
P   91000700     416   416   416   416   416   416              3H
P   91000700     416   416   416   416   416   416              4H
P   91000800     1266                                             D
P   91000800     25    25    25    25                             S
P   91000800     0     0     0     0     0     0                1H
P   91000800     83    83    83    83    83    33               2H
P   91000800     83    83    83    83    83    83               3H
P   91000800     0     0     0     0     0     0                4H
P   91000900     1087                                             D
P   91000900     0     30    70    0                              S
P   91000900     0     0     0     0     0     0                1H
P   91000900     83    83    83    83    83    83               2H
P   91000900     83    83    83    83    83    83               3H
P   91000900     0     0     0     0     0     0                4H
P   91002100     1087                                             D
P   91002100     25    25    25    25                             S
P   91002100     0     0     0     0     0     0                1H
P   91002100     67    67    67    67    67    67               2H
P   91002100     67    67    67    67    67    67               3H
P   91002100     40    40    40    40    40    0                4H
P   91002200     1266                                             D
P   91002200     25    25    25    25                             S
P   91002200     0     0     0     0     0     0                1H
P   91002200     10    10    10    10    10    10               2H
P   91002200     10    10    10    10    0     0                3H
P   91002200     0     0     0     0     0     0                4H
P   91002300     1266                                             D
P   91002300     20    25    30    25                             S
P   91002300     0     0     0     0     0     0                1H
P   91002300     89    89    89    89    89    89               2H
P   91002300     39    39    89    31    28    28               3H
P   91002300     28    28    28    28    0     0                4H
P   91002400     1266                                             D
P   91002400     20    25    30    25                             S
P   91002400     0     0     0     0     0     0                1H
P   91002400     89    89    89    89    89    89               2H
P   91002400     89    89    89    31    28    28               3H
P   91002400     23    28    28    28    0     0                4H
P   91308300     1266                                             D
P   91308300     20    25    30    25                             S
P   91308300     0     0     0     0     0     0                1H
P   91308300     89    89    89    89    89    89               2H
P   91308300     89    89    89    31    28    28               3H
P   91308300     28    28    28    28    0     0                4H
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